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LN17 and LN17ps Printers

User Guide

Order Number: EK–LN17P–UG. A02

Digital Equipment Corporation
Maynard, Massachusetts

Second Printing, May 1996

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Specifications described in this publication are subject to change without notice. Use of some features may be limited by your hardware or software configuration. Contact your dealer or Digital for details.

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LN17 and LN17ps Printer Models

This book is for use with both the Digital LN17 and LN17ps High Performance Network Printers. The LN17ps printer contains all the components of the LN17 printer, plus the following options:

- Adobe PostScript Level 2
- 4 MB additional memory
- DNIC-E'NET (Digital Network Interface Card for Ethernet)

As this guide serves both printers, the LN17ps printer will hereafter be referred to as the LN17 printer.

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How Much of This Book Must I Read?

You do not have to read any of this guide to use your LN17 printer. The LN17 printer is ready to go after you set it up following the instructions in the *Setting Up Guide*.

Use this guide as a reference for:

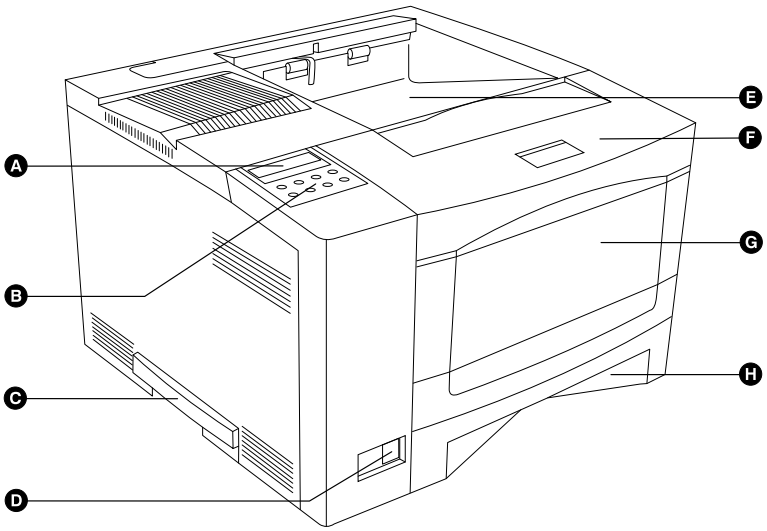
- Learning about special printer features [*"Special Features"* (page 1-6)]
- Tips on taking care of the printer [*"Maintaining the Printer"* (page 1-13)]
- Paper specifications, loading paper, and duplex printing (*Chapter 2: Paper Handling*)
- Instructions on using the Control Panel (*Chapter 3: Using the Control Panel* and *Appendix D: Control Panel Options*)
- Installing printer drivers (*Chapter 4: LN17 Printer Driving Software*)
- Downloading fonts (*Chapter 5: Using the Hard Drive/ Downloading Fonts*)
- Troubleshooting printing problems if they occur (*Chapter 6: Troubleshooting*)
- Ordering printer options (*Appendix A: Ordering Printer Options*)
- Replacing consumables (*Appendix B: Replacing Consumables*)
- Installing and removing printer options (*Appendix C: Installing and Removing Printer Options*)
- Printer specifications (*Appendix F: Printer Specifications*)

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Printer Components

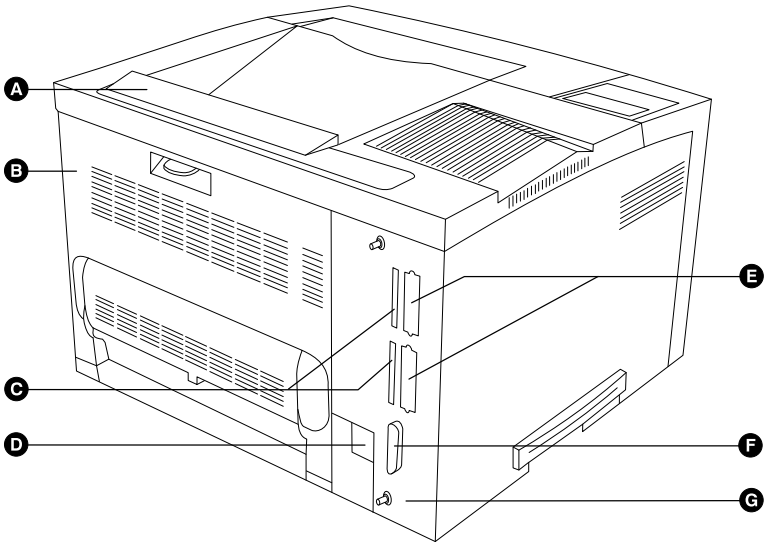
The major printer components are indicated below.

Figure 1.1 Major printer components



Front View

- **A** Control Panel Display
- **B** Control Panel Keypad
- **C** Recessed Grip
- **D** Power Switch
- **E** Standard Output Tray
- **F** Front Cover
- **G** Front Tray (Multi-sheet Bypass Tray)
- **H** Main Tray



Rear View

- **A** Option Interface Cover
- **B** Rear Cover
- **C** Reserve
- **D** Power Inlet
- **E** Network Ports (Options)
- **F** Parallel Port
- **G** Controller Assembly

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Special Features

Several features have been designed into the LN17 printer to enhance your printing environment. Using the printer's Control Panel menu system, you can tailor printer settings to match your printing requirements.

See *Chapter 3: Using the Control Panel* for more information about the Control Panel and its menu system.

Power Saver

After 60 minutes of inactivity, the printer automatically turns off internal components to reduce the amount of electricity used. The printer automatically turns those parts back on when it receives a print job.

Using the printer's Control Panel menu system, you can send the printer into Power Saver mode after your choice of 15, 30, 60, 90 or 120 minutes of inactivity (or Power Saver mode can be disabled).

See the section *"System Menu"* (page 3-24) in *Chapter 3: Using the Control Panel*.

High Resolution Printing

The LN17 printer is set to print at 600 x 600 dpi (dots per inch). You can change this setting to 1200 x 600 dpi to enhance grayscale images.

For professional quality printouts, the Print Quality option (in the PCL Emulat and PostScript menus) is set to *TrueRes*. The TrueRes setting smooths edges to produce a crisper looking printout.

If you want to print draft-quality jobs, set Print Quality to *Toner Saving*. The printer automatically reduces the amount of toner used (and prints a lower-quality output).

See *Chapter 3: Using the Control Panel* for instructions on changing Control Panel settings.

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Edge to Edge Printing

For those instances when you need to print PCL 5e Emulation (hereafter referred to as PCL) jobs all the way to the edge of the page, turn on the *Edge to Edge* option in the PCL Emulat Menu. Edge to edge printing is always available for PostScript jobs and requires no setting. Just format your document to the edge of the page.

See *Chapter 3: Using the Control Panel* for instructions on changing Control Panel settings.

Automatic Tray Switching

The LN17 printer allows you to set automatic tray switching for both PCL and PostScript (when PostScript is installed) jobs. When tray switching is on, and the paper tray runs out of paper, the printer automatically switches to another paper tray (if another tray is loaded with the same size paper). That means you don't have to load paper as often. You can also install one or two optional 500-sheet Paper Deck and Cassettes (lower trays) to extend your printing capacity.

For more information on tray switching, see the section *"Automatic Tray Switching"* (page 2-13) in *Chapter 2: Paper Handling*.

Automatic Language Sensing and Switching

When you have installed the PostScript option, the printer can process both PCL and PostScript jobs. When the printer's Language Sensing option is on, the LN17 printer samples the incoming data stream to determine which language the print job requires. The LN17 printer then switches to the proper language for that job.

The LN17 printer can have up to three active ports when you install two optional network interface cards. Turn the Language Sensing option *on* for all the ports, and the printer automatically samples each print job and switches to the appropriate processing language.

For more information about language sensing and switching, see *Appendix D: Control Panel Options*.

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State Saving

When you are printing both PostScript and PCL jobs, the printer clears any downloaded fonts, macros, and PostScript headers when it switches between PostScript and PCL 5e Emulation. However, you can set the printer's State Saving option to *On*, and the printer will save downloaded fonts, macros, and PostScript headers when it switches PDLs (Printer Description Language). This saves you from having to download fonts, macros, and headers every time the printer switches between PostScript and PCL 5e Emulation.

Printer Generated Reports

Using the printer's Control Panel, you can print five separate reports.

- The **Demo Page** provides a sample of the printer's capabilities and lists the printer's key features.
- The **Configuration Sheet** lists the options you have installed and the current settings for each option in the Control Panel's menu system.
- The **PCL Font List** shows which PCL fonts are currently available. The list includes resident fonts and downloaded fonts.
- When PostScript is installed on the LN17 printer, the **PostScript Font List** shows which PostScript fonts are currently available. The list includes both resident and downloaded fonts.
- The **Test Print** is used by service and repair technicians if problems occur with the printer.

See *Appendix D: Control Panel Options* for more information about these reports.

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Optional Features

Several optional features are available to enhance your printing capabilities.

Table 1.1 Locating Information on Printer Options

For Information on:	Look in:
Installing options	*Appendix D: Control Panel Options*
Using paper handling options	*Chapter 2: Paper Handling*
Associated menu options	*Chapter 3: Using the Control Panel*

PostScript Option

Installing the PostScript option adds PostScript Level 2 capability and additional memory to your printer.

See *Appendix A: Ordering Printer Options* to order the PostScript SIMM.

Duplex Printing

The LN17 printer can print two-sided documents when you install the optional Duplex Module. After installing the Duplex Module and an LN17 printer driver, printing a two-sided document is as easy as printing a one-sided job.

See *Appendix A: Ordering Printer Options* to order a Duplex Module.

Increased Paper Handling

An optional 500-sheet lower tray (the 500-sheet Paper Deck and Cassette) is available for the LN17 printer. Install two lower trays and you increase the input capacity for the LN17 printer by 1,000 sheets.

See *Appendix A: Ordering Printer Options* to order a Lower Tray.

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Collating and Offsetting

Two optional output trays are available for the LN17 printer that provide a second output destination for your print jobs. Send your print job to the standard output tray or either optional output tray.

- The Offset Catch Tray (OCT) sits above the standard output tray. It increases the output tray capacity for the printer and offsets jobs from each other.
- The 10-bin Mailbox/Collator sits atop the standard output tray. You can use this as a 10-bin privacy-protected mailbox for multiset collation.

See *Chapter 2: Paper Handling* for more information about using the Offset Catch Tray and Mailbox/Collator.

See *Appendix A: Ordering Printer Options* to order an Offset Catch Tray or a Mailbox/Collator.

Memory Expansion

The LN17 base printer has 2 MB resident memory and can be increased with available 4 MB, 16 MB, and 32 MB SIMMs.

See *Appendix A: Ordering Printer Options* to order more printer memory.

Hard Drive

A hard drive is also available for the printer. The hard drive can be used for print spooling, font storage, macro storage, and state saving.

See *Chapter 5: Using the Hard Drive/ Downloading Fonts* for more information about the hard drive.

See *Appendix A: Ordering Printer Options* to order a hard drive.

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Memory Considerations

In today's printing environments, technologies have advanced greatly. Corresponding memory requirements have increased too.

- LN17 printing features such as Page Protection and State Saving, when on, use available printer memory—memory that is otherwise used for processing jobs.
- Downloading fonts also uses available printer memory.

If you plan to print highly complex jobs or need features like State Saving and Page Protection, you may need to add printer memory.

Table 1.2 on page 1-12 lists the memory required when printing one-sided jobs at both 600 x 600 dpi and 1200 x 600 dpi.

Table 1.3 on page 1-12 lists the memory required when printing two-sided jobs at both 600 x 600 dpi and 1200 x 600 dpi.

Table 1.2 Minimum memory requirements for printing one-sided jobs at 600 x 600 dpi and at 1200 x 600 dpi

Option Settings	600 x 600 dpi	1200 x 600 dpi
Page Protection OFF	2 MB	2 MB
PCL Emulat **Page Protection** LETTER size	5 MB	9 MB
PCL Emulat **Page Protection** A4 size	6 MB	10 MB
PCL Emulat **Page Protection** LEGAL size	6 MB	12 MB
PostScript **Page Protection** ON, printing Letter size	7 MB	11 MB
PostScript **Page Protection** ON, printing A4 size	7 MB	12 MB
PostScript **Page Protection** ON, printing Legal size	8 MB	14 MB
PCL Emulat and PostScript **Page Protection** and **State Saving** Enabled	9 MB	14 MB

Table 1.3 Minimum memory requirements for printing two-sided jobs at 600 x 600 dpi and at 1200 x 600 dpi

Option Settings	600 x 600 dpi	1200 x 600 dpi
Page Protection OFF	4 MB	4 MB
PCL Emulat **Page Protection** LETTER size	9 MB	17 MB
PCL Emulat **Page Protection** A4 size	10 MB	18 MB
PCL Emulat **Page Protection** LEGAL size	12 MB	22 MB
PostScript **Page Protection** ON, printing Letter size	11 MB	21 MB
PostScript **Page Protection** ON, printing A4 size	12 MB	22 MB
PostScript **Page Protection** ON, printing Legal size	14 MB	28 MB
PCL Emulat and PostScript **Page Protection** and **State Saving** Enabled	14 MB	30 MB

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Maintaining the Printer

Maintaining the printer in good operating condition is essential to having a reliable, well-running machine.

Cleaning the Printer

For optimum performance, do not place the printer near vents or dust-producing equipment. Particles in the air may enter the printer and cause failures in internal mechanisms.

For best results, clean the outside of the printer with a damp cloth. Power the printer off before cleaning. Do not use detergents.

Replacing the EP Cartridge

An EP (electronic printing) cartridge will print approximately 10,000 pages of A4 or 8.5 x 11 paper under average operating conditions (5% image area coverage). The number of prints per cartridge will decrease if you routinely:

- Print dense text and graphics.
- Set Print Density (in the System Menu) to a dark setting.
- Exceed five percent area coverage.

Replace the EP cartridge as soon as you see the following message at the printer's Control Panel display:

```
Toner Low
```

See *Appendix A: Ordering Printer Options* for ordering a new EP cartridge.

Recycling the EP Cartridge

The LN17 printer EP cartridge can be recycled free of charge to you. Follow the instructions packaged with your new EP cartridge to recycle the old one.

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Replacing the Fuser Cartridge/ Bias Transfer Roll

The Fuser Cartridge and Bias Transfer Roll (BTR) have expected useful lives of 200,000 prints. When this point is reached, you will see the following message at the printer's Control Panel display:

```
Replace
Fuser Cartridge
```

Although printing can continue, to ensure optimum print quality, you should order and replace these parts as soon as possible. See *Appendix A: Ordering Printer Options* for ordering information.

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Technical Support

If you are unable to resolve a printing problem using the instructions in *Chapter 6: Troubleshooting*, contact the dealer from which you bought your printer or contact Digital.

Before Calling for Service

Before contacting your dealer or Digital, please have the following information available:

- Printer serial number.
- A Configuration Sheet
- Any error code or message displayed on the Control Panel
- A description of the problem
- Type of network (if problem is network related)

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Transporting the Printer

When transporting the printer more than a short distance, use the original shipping box and packaging materials. If the original shipping box or materials are not available, use a sturdy packing box and a generous amount of cushioning or packing materials.

To prepare your printer for transportation, follow the instructions below.

1. **Power off the printer and disconnect the power cord and all interface cables.**
2. **Remove any paper handing options and repack each in its original packaging.**
3. **Remove the hard drive (if it is installed), and repack it in its original packaging. See** *Appendix C: Installing and Removing Printer Options***.**
4. **Remove the EP cartridge and pack it in its original packaging.**
5. **Pack the printer with the sealed EP cartridge and power cord in the original printer box.**

If you need to return the printer for service, follow the instructions of your service provider for packing and shipping.

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Chapter 2

Paper Handling

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Selecting Paper

Table 2.1 lists the size paper, envelopes, and other print media you can use with all LN17 printer input and output trays. Using sizes other than those listed below, or paper not recommended for laser printers, may result in paper jams.

Table 2.1 Acceptable paper sizes for all LN17 printer paper trays

Paper Size	Main Tray Lower Tray†	Front Tray OCT†‡ Standard Output Tray	Mailbox / Collator†	Envelope Feeder†
A4 (210x297 mm)	•	•	•	
Letter (8.5x11 in / 216x279 mm)	•	•	•	
Folio (Legal 13 in) (8.5x13 in / 216x330 mm)	•	•		
Legal (Legal 14 in) (8.5x14 in / 216x356 mm)	•	•		
Executive (7.25x10.5 in / 184x267 mm)	††	•		
Statement (5.5x8.5 in / 140x216 mm)		•		
ISO B5 (176x250 mm)		•		
Envelope				
COM-10 (4.12x9.5 in / 105x241 mm)		•		•
Monarch (3.87x7.5 in / 98x191 mm)		•		•
DL (4.33x8.66 in / 110x220 mm)		•		•
C5 (6.38x9.01 in / 162x229 mm)		•		•
C6 (4.49x6.38 in / 114x162 mm)		•		•
Transparency				
A4 (210x297 mm)		•		
Letter (8.5x11 in / 216x279 mm)		•		
Label				
A4 (210x297 mm)		•		
Letter (8.5x11 in / 216x279 mm)		•		
A6 (International Postcard) (100 x 148 mm)		•		

† Optional paper handler. See Appendix A for ordering information.

‡ Although the OCT will accept all paper sizes listed, it can only offset A4, Letter, Folio, and Legal.

†† Only the main tray accepts Executive.

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Storing Paper

The LN17 printer's print quality is optimized when paper and other print media are properly stored. Proper storage ensures optimum print quality and trouble-free printer options.

- Store the paper on a flat surface, in a relatively low humidity environment.
- Do not unwrap paper until you are ready to use it, and rewrap any paper you are not using.
- Do not expose paper to direct sunlight or high humidity.

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Using the Main Tray or Lower Tray

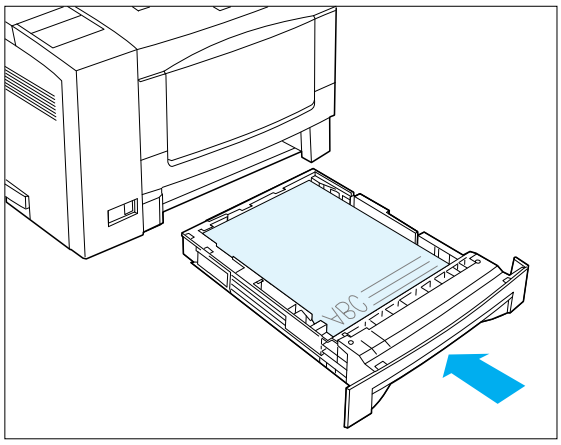
Paper and other print media are loaded into the main and lower trays identically. Refer to Table 2.1 on page 2-3 for acceptable paper sizes.

- The main tray holds 250 sheets of 75 g/m^2 (20 lb) paper.
- The optional lower tray holds 500 sheets of 75 g/m^2 (20 lb) paper.

Consult Figure 2.1 for proper orientation of letterhead and drilled paper.

Figure 2.1 Main/lower tray paper orientation

Letterhead (Simplex)



Letterhead (Duplex)

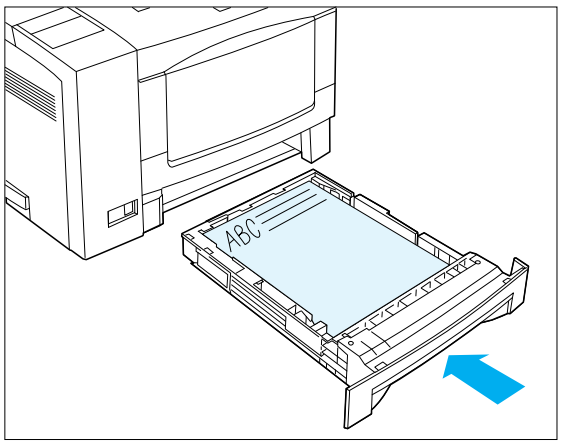
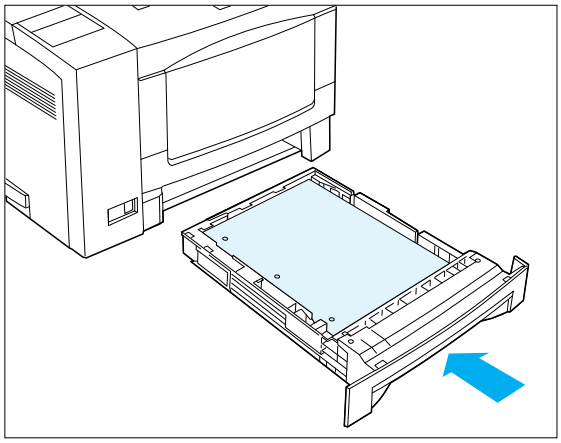


Figure 2.1 Main/lower tray paper orientation *(continued)*

Drilled Paper
(Simplex or Duplex)



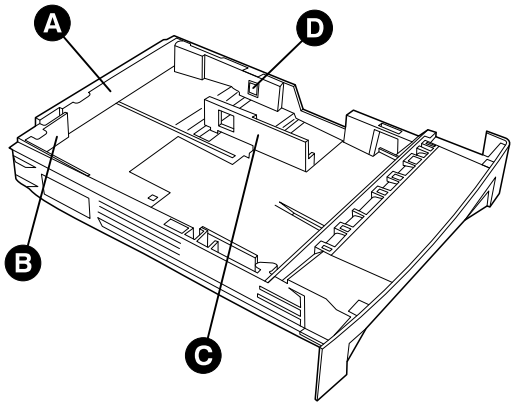
Caution

Do not load the main tray or lower tray during printing.

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Adjusting the Main Tray for Paper Size

Figure 2.2 Main tray paper adjustment guides



A End guide A

B End guide B

C Width guide

D Size lock button

End guides (A) and (B) slide to fit the length of the paper.

- When going from smaller to larger, slide end guide (A) first.
- When going from larger to smaller, slide end guide (B) first.

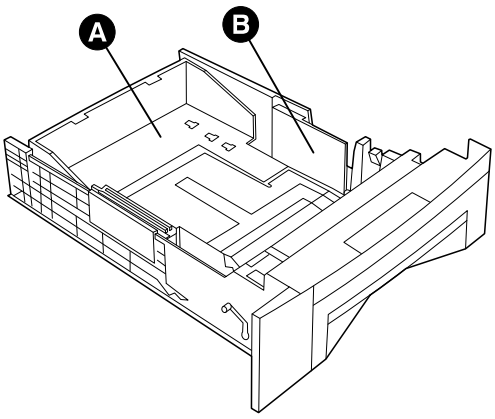
The width guide (C) slides to fit the width of the paper.

The size lock button (D) depresses to release end guide (A).

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Adjusting the Lower Tray for Paper Size

Figure 2.3 Lower tray paper adjustment guides



A End guide

B Width guide

The end guide (A) slides to fit the length of the paper.

- First lift up one side of the end guide at the rear of the tray.
- Then lift up the other side of the end guide at the rear of the tray.
- Then pull out the tray to lengthen it, or push it in to shorten it.

The width guide (B) slides to fit the width of the paper.

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Using the Front Tray

The front tray accepts all paper sizes and types listed in Table 2.1 on page 2-3. The front tray holds:

- 100 sheets of 75 g/m^2 (20 lb) paper
- 50 sheets of 180 g/m^2 card stock
- 30 transparencies or 25 sheets of label paper
- 10 envelopes

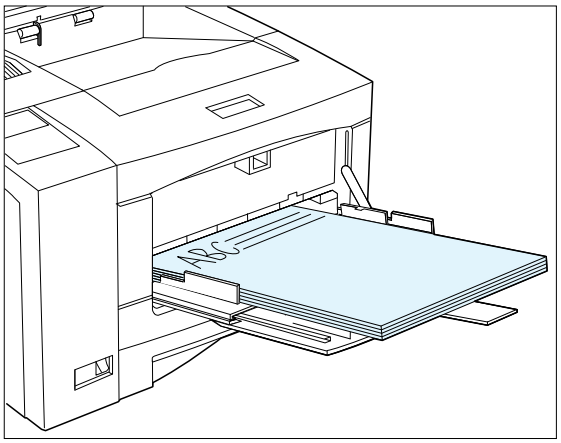
Consult Figure 2.4 for proper orientation of letterhead, drilled paper, envelopes and postcards in the front tray.

Note

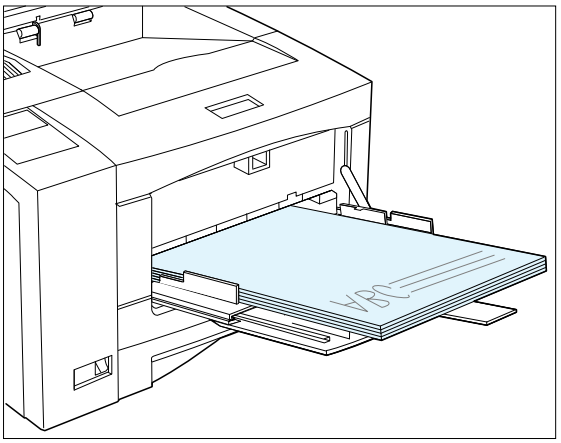
The size of paper loaded in the front tray of the printer should match the size entered as "Manual Size" in the PostScript or PCL menu at the front panel.

A paper jam may result if the printer expects longer or shorter media than is actually loaded. When you load a new size paper in the front tray, change the "Manual Size" entry in the PostScript or PCL menu to match this new size.

Figure 2.4 Front tray paper orientation

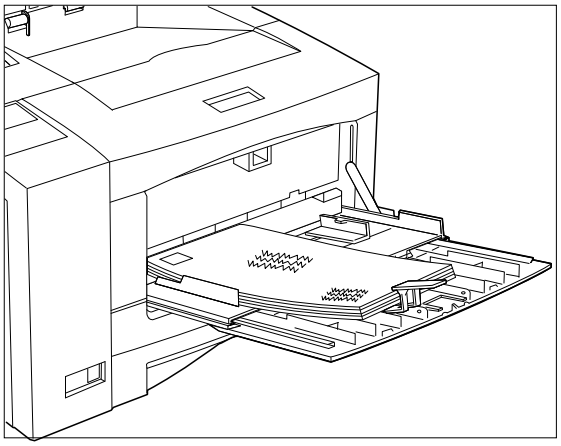


Letterhead (Simplex)

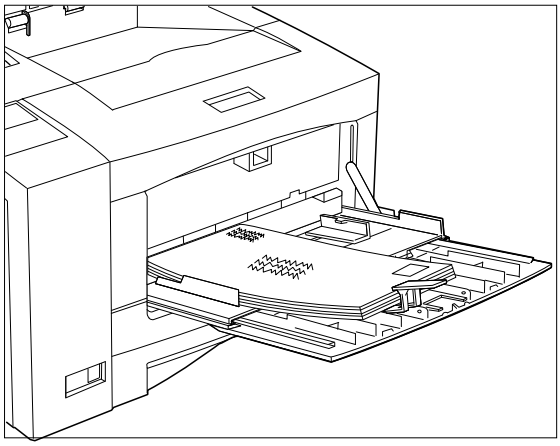


Letterhead (Duplex)

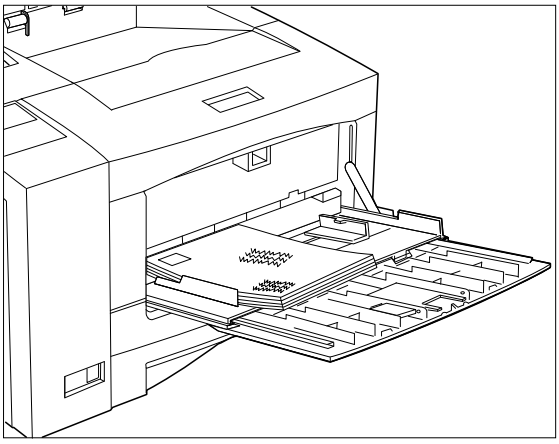
Figure 2.4 Front tray paper orientation *(continued)*



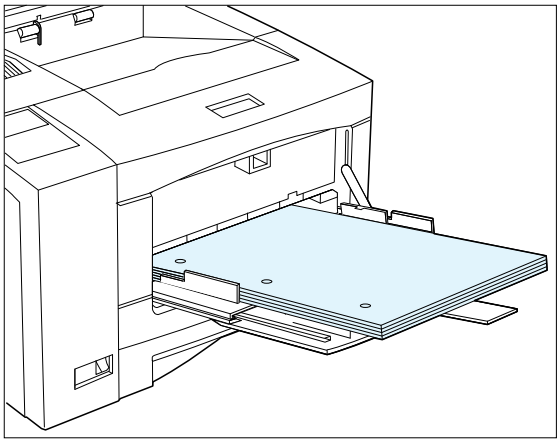
Envelopes (PCL Jobs)



Envelopes (PostScript Jobs)



Postcards (PCL Jobs)†

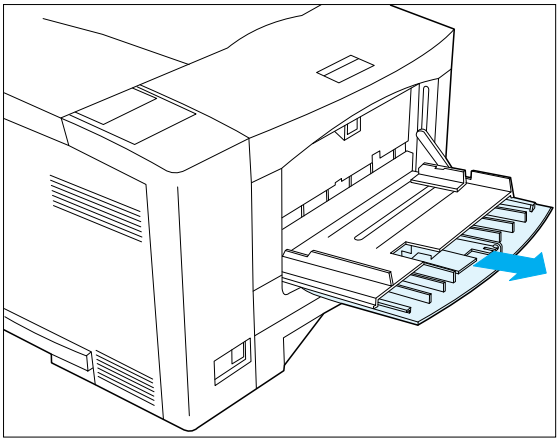


Drilled Paper (Simplex or Duplex)

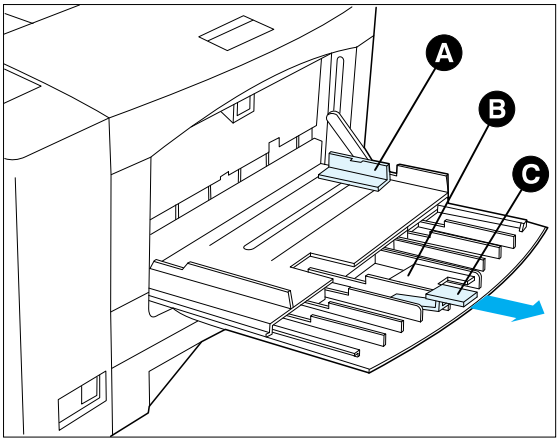
† Orientation may differ for PostScript jobs. Test your application.

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Loading the Front Tray

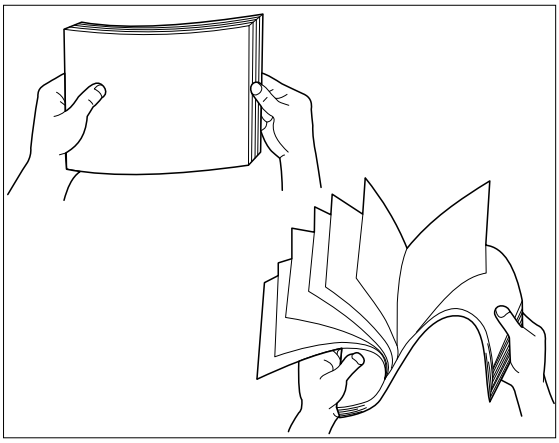


1 **Press the top of the front tray to open it, then pull out the tray extension.**

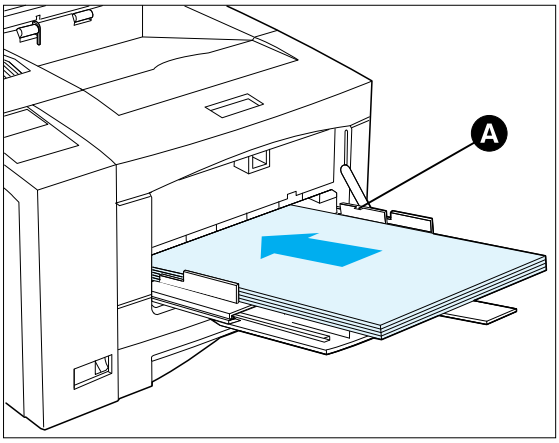


2 **Slide the side guide (A) to the far right.**

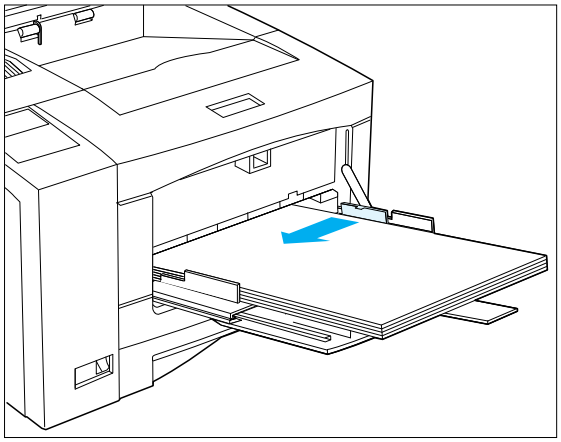
Flip open the extension bar (B) if feeding long paper. Pull out the envelope stopper (C) if feeding envelopes.



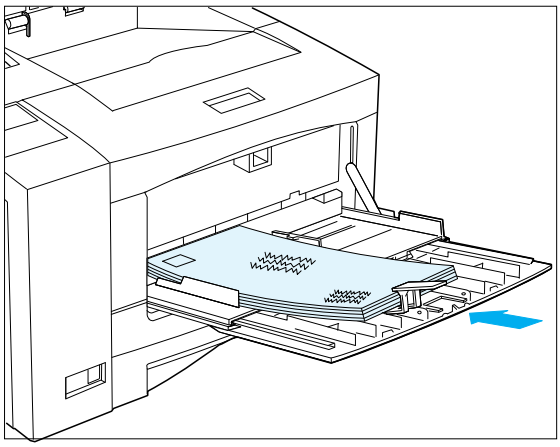
3 **Fan transparencies and label paper before loading in the tray.**



4 **Insert paper along the left side of the tray, under the plastic maximum fill tab (A).**



5 **Adjust the side guide to the size of the paper loaded in the front tray.**



6 **When feeding envelopes, slide the end of the envelope stopper over the end of the envelope stack.**

The envelope stopper keeps envelopes from backing out of the stack while feeding.

7 **Because the front tray does not have a paper size sensor, you must tell the printer which size paper is loaded. Set the following options after loading paper in the front tray:**

- For PCL jobs, set the **Front Tray Size** option to the size paper loaded in the front tray.
- For PostScript jobs, set the **Manual Size** option to the size paper loaded in the front tray.

See *Chapter 3: Using the Control Panel* for instructions on accessing the PCL Emulat and PostScript menus.

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Automatic Tray Switching

Automatic tray switching is available for both PCL emulation and PostScript jobs. Tray switching is useful for:

- Increasing paper capacity.

 When the current paper tray runs out of paper, the printer automatically switches to the next tray in the sequence, provided the paper size in the next tray is the same size as that in the current tray.

- Searching for the correct paper size.

 If the paper size specified in your software application does not match the size paper loaded in the current paper tray, the printer automatically searches the next tray in the sequence for a paper size that matches.

PostScript Tray Switching

The **Tray Switching** option (in the PostScript Menu) can be set to any of the settings shown in Table 2.2 below.

Table 2.2 Tray switching settings

Tray Switching Setting	Description
Off Main-Front Tray	Standard Tray Switching selections for PostScript jobs
Lower 1-Main	Additional Tray Switching setting that appears when a 500-sheet Paper Deck and Cassette is installed
Lower 2-Main Lower 1-Lower 2 Lwr1-Lwr2-Main	Additional Tray Switching settings that appear when a second 500-sheet Paper Deck and Cassette is installed

For example, when Tray Switching is off, no tray switching occurs. When set to Main-Front the printer automatically switches to the front tray when the main tray becomes empty (provided the correct size paper is in both trays).

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PCL Tray Switching (Source Mapping)

Tray switching for PCL emulation jobs is controlled by the settings for Source Mapping (in the PCL Emulat Menu). (See *Chapter 3: Using the Control Panel* for information on using the Control Panel.)

- If you are familiar with the concept of source mapping, skip to *"Default Source Mapping Settings"* (page 2-16) and *"Customizing Source Mapping Settings"* (page 2-16).
- If source mapping is a new concept to you, continue reading.

When you send a PCL job to the printer, commands in the data stream tell the printer what logical paper source to use and on what size paper to print. The way in which the printer interprets the PCL command for paper source and page size depends on the PCL Emulat Menu settings for Source Mapping and Paper Size.

If the printer receives no paper tray or paper size information from your software application, it uses the PCL Emulat Menu settings for Paper Size and Default Source.

PCL recognizes the six paper sources shown in Table 2.3. (These PCL paper sources may, or may not, appear in your software application, or they may appear under alternate names.)

Table 2.3 Six PCL paper sources

PCL Paper Source	Alternate Names
Upper	Main Tray, Paper Tray, Paper Cassette
Manual	Front Tray, Manual Feed
Manual Envelope	Envelope Manual Feed
Lower	Lower Tray
Large Capacity	Paper Deck
Envelope Feeder	N/A

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When you choose, for example, “Main Tray” or “Paper Tray” as the paper source in your application, the PCL data stream tells the printer to print using paper from the “Upper” paper source.

The printer’s Source Mapping option maps the PCL paper source command to the paper trays on the printer. If, for example, the “Upper” source is mapped to the printer’s main tray, the printer will feed paper from the main tray whenever you choose “Upper,” “Main Tray,” or “Paper Cassette” in your application.

Table 2.4 lists the Source Mapping settings that can be set for each of the PCL paper sources in Table 2.3.

Table 2.4 Source Mapping settings

Source Mapping Setting	Description
Main Tray Front Tray Main-Front Tray	Tray or tray sequence to be used for each of the six PCL paper sources
Lower 1 Lower 1-Main	Additional Source Mapping settings that appear when a 500-sheet Paper Deck and Cassette is installed
Lower 2 Lower 2-Main Lower 1-Lower 2 Lwr1-Lwr2-Main	Additional Source Mapping settings that appear when a second 500-sheet Paper Deck and Cassette is installed

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Default Source Mapping Settings

Table 2.5 shows the Source Mapping settings in effect with the base printer, as well as those when one or two Lower Trays are installed.

Table 2.5 Default Source Mapping settings

PCL Paper Source	Base Configuration	One Lower Tray	Two Lower Trays	Envelope Feeder
Upper	Main Tray	Main Tray	Main Tray	Main Tray
Manual	Front Tray	Front Tray	Front Tray	Front Tray
Manual Envelope	Front Tray	Front Tray	Front Tray	Envelope Feeder
Lower	Main Tray	Lower 1 Tray	Lower 2 Tray	Main Tray
Large Capacity	Main-Front	Lower 1-Main	Lwr1-Lwr2-Main	Main-Front
Envelope Feeder	Front Tray	Front Tray	Front Tray	Envelope Feeder

Customizing Source Mapping Settings

You may change the Source Mapping settings to best fit your printing needs. For example, you may want the printer to automatically feed from the front tray when the main tray becomes empty. The Source Mapping examples shown next in this guide can help you customize Source Mapping settings for your printing environment.

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Example: Main Tray-Front Tray

Table 2.6 below shows how to set the Source Mapping settings so that the printer pulls paper first from the main tray and then from the front tray.

Regardless of the source you choose from your application, the printer will always pull paper first from the main tray. When the main tray is empty, the printer will pull paper from the front tray.

Table 2.6 Source Mapping settings for tray switching between the main and front trays

PCL Paper Source	Source Mapping Setting
Upper	Main-Front Tray
Manual	Main-Front Tray†
Manual Envelope	Main-Front Tray
Lower	Main-Front Tray
Large Capacity	Main-Front Tray
Envelope Feeder	Main-Front Tray

† Set this to Front if you want to print special paper through the front tray.

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Example: Lower Tray-Main Tray

Suppose you have a lower tray installed and you want to maximize the paper supply. But you also want to print special paper, such as envelopes or labels, through the front tray.

Table 2.7 below illustrates how to set the Source Mapping settings so that the printer switches between the lower and main trays as one tray becomes empty, yet leaves the front tray available.

Table 2.7 Source Mapping settings for tray switching between the lower and main trays

PCL Paper Source	Source Mapping Setting
Upper	Lower 1-Main
Manual	Front Tray
Manual Envelope	Front Tray
Lower	Lower 1-Main
Large Capacity	Lower 1-Main
Envelope Feeder	Front Tray

When using the settings in Table 2.7, choose Upper, Lower, or Large Capacity (or an equivalent paper source, as shown in Table 2.3 on page 2-14) to engage tray switching. To print a job on special paper, choose Manual, Manual Envelope, or Envelope Feeder as the paper source in your application.

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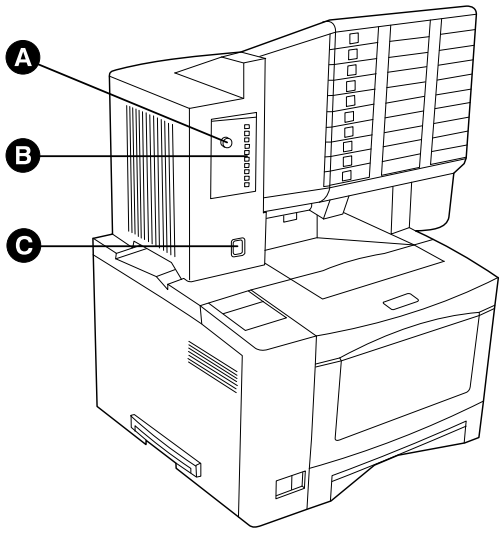
Using the Mailbox/ Collator

The Mailbox/Collator (Figure 2.5) is an optional output device available for the LN17 printer. It accepts only A4 and Letter paper sizes.

(See *Appendix A* for ordering information; *Appendix B* for installation instructions.)

Figure 2.5 Mailbox/Collator (front view)

A Bin Unlock button
B Open bin indicators
C Power switch



The Mailbox/Collator offers the following capabilities:

- Printing multiple collated sets (2 to 10 sets) of a job. See *"Printing to the Mailbox/Collator"* (page 2-20).
- Directing output to a specific mailbox bin. See *"Printing to the Mailbox/Collator"* (page 2-20).
- Printing secure jobs. See *"Password Protecting Jobs"* (page 2-20).

With the Mailbox/Collator installed, the standard output tray still functions normally. The Mailbox/Collator gives you approximately 50 sheets per bin of letter/A4, 20 lb (75 g/m^2) weight paper for a maximum output of 500 sheets. The standard output tray adds another 250 sheets.

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Printing to the Mailbox/Collator

Using an LN17 printer driver, select a specific “Bin” or “Collator” as the paper output destination for your job, then print your job.

- Bins are numbered from 1 - 10 (top to bottom).
- Each bin can hold up to 50 sheets of 20 lb (75 g/m^2) paper. When a bin becomes full:
 - — the remainder of the print job is diverted to the top output tray when the Bin Full option (in the Mailbox Menu) is set to *Send to Standard*.
 - — printing stops when the Bin Full option is set to *Stop Printing*. Once you remove the output, the printer resumes printing.

Password Protecting Jobs

Using the LN17 Control Panel, you can set a different password for each mailbox bin and one password for the collator mode. A job sent to a password-enabled bin can only be removed by the individual with the bin password; a job sent to the collator can only be removed from the password-enabled collator mode by the individual with the collator password.

Digital recommends that you use the Mailbox/Collator exclusively in either collator mode or bin mode, not both, if you plan to set passwords. The only way to control the mode in which it is used is through the use of passwords. If passwords are enabled for bins but disabled for collator, jobs sent to password-enabled bins can be removed by anyone who chooses “collator” as the output tray (because no password is needed). For this reason, Digital recommends you either enable or disable passwords for both bins and collator mode.

- If you plan to use passwords for bins, also set a password for collator mode. Distribute individual bin passwords to the appropriate users. Do not distribute the password for collator mode.
- If you plan to use a password for collated jobs, also set passwords for each bin. Distribute the collator password

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to the appropriate users. Do not distribute individual bin passwords.

See *"Enabling Passwords"* (below) and *"Disabling Passwords"* (page 2-23) for instructions.

Enabling Passwords

Follow the instructions below to set passwords.

1 **Power ON the printer.**

The printer will complete its self-test and display the following message at the Control Panel Display:

```
Online
Ready
```

2 **Press Online ⇤, then Menu ▤ and you will see:**

```
Main Menu
Language
```

3 **Press Down ⌄ until you see:**

```
Main Menu
Mailbox Menu
```

4 **Press Enter * and the display changes to:**

```
Mailbox Menu
Collator
```

To set a collator password, continue to Step 5.

To set a bin password, skip to Step 6.

5 **Press Enter * and the display changes to:**

```
Collator
Enable Password
```

Skip to Step 9.

6 **Press Down ⌄ until you see:**

```
Mailbox Menu
Mailbox
```

7 **Press Enter * and the display changes to:**

```
Mailbox
Bin 1
```

8 **Press Down ˅ or Up ^ to select the appropriate bin. Then press Enter * .**

The display changes to:

```
Bin N
Enable Password
```

9 **Press Enter * again and the display changes to:**

```
Enter Password
>> XXXX
```

10 **Enter the existing password using the numbered keys on the Control Panel.**

The initial passwords for each bin after installing the Mailbox / Collator for the first time are:

Collator: 0000

Bin 1: 0001	*Bin 6: 0006*
Bin 2: 0002	*Bin 7: 0007*
Bin 3: 0003	*Bin 8: 0071*
Bin 4: 0004	*Bin 9: 0072*
Bin 5: 0005	*Bin 10: 0010*

After entering the correct password, the display changes to:

```
New Password
>> XXXX
```

11 **To enable the existing password, enter it again. To set a new password, enter a new password, then press Enter * .**

The password is now enabled.

12 **Press Online ⇤ to bring the printer back online.**

The Mailbox/Collator is now set up for use. The display should read:

```
Online
Ready
```

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Disabling Passwords

Follow the instructions below to disable passwords.

1 **Power ON the printer.**

The printer will complete its self-test and display the following message at the Control Panel Display:

```
Online
Ready
```

2 **Press Online , then Menu and you will see:**

```
Main Menu
Language
```

3 **Press Down until you see:**

```
Main Menu
Mailbox Menu
```

4 **Press Enter * and the display changes to:**

```
Mailbox Menu
Collator
```

To disable a collator password, continue to Step 5 on page 2-23.

To disable a bin password, skip to Step 7 on page 2-23.

5 **Press Enter * and the display changes to:**

```
Collator
Enable Password
```

6 **Press Down until you see:**

```
Collator
Disable Password
```

Skip to Step 11.

7 **Press Down until you see:**

```
Mailbox Menu
Mailbox
```

8 **Press Enter * and the display changes to:**

```
Mailbox
Bin 1
```

9 **Press Down ˇ or Up ^ to select the appropriate bin. Then press Enter *.**

The display changes to:

```
Bin N
Enable Password
```

10 **Press Down ˇ until you see:**

```
Bin N
Disable Password
```

11 **Press Enter * again and the display changes to:**

```
Enter Password
>> XXXX
```

12 **Enter the existing password using the numbered keys on the Control Panel.**

The initial passwords for each bin after installing the Mailbox / Collator for the first time are:

Collator: 0000

Bin 1: 0001	*Bin 6: 0006*
Bin 2: 0002	*Bin 7: 0007*
Bin 3: 0003	*Bin 8: 0071*
Bin 4: 0004	*Bin 9: 0072*
Bin 5: 0005	*Bin 10: 0010*

13 **Press Online ← to bring the printer back online.**

The Mailbox/Collator is now set up for use. The display should read:

```
Online
Ready
```

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Opening Bins

Follow the appropriate instructions for opening either a password-enabled or password-disabled bin.

Opening Password-Enabled Bins

To open a bin (or the collator) for which a password has been enabled:

1. Push the *Bin Unlock* button.

 You are prompted to enter your password at the Control Panel.

2. Using the numbered Control Panel keys, enter your password.

 If you enter an invalid password, the printer returns to its ready state, and you must start the unlocking process again.

 A light appears to indicate each unlocked bin. Open all unlocked bins, then remove the output. You have approximately 30 seconds to open the bin(s). If the Mailbox/Collator re-locks, push the *Bin Unlock* button again immediately.

Opening Password-Disabled Bins

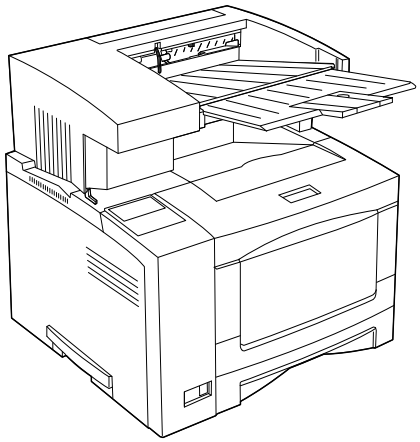
Push the *Bin Unlock* button and a light appears to indicate each unlocked bin. Open all full bins, then remove the printouts.You have approximately 30 seconds to open the bin(s). If the Mailbox/Collator re-locks, push the *Bin Unlock* button again immediately.

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Using the Offset Catch Tray (OCT)

The Offset Catch Tray (Figure 2.6)—hereafter referred to as OCT—is an optional output device available for the LN17 printer. (See *Appendix A* for ordering information and *Appendix B* for installation instructions.)

Figure 2.6 Offset Catch Tray (front view)



After installing the OCT, submit your print jobs as usual.

You can set the OCT to operate in three different manners:

- Set the Output Bin option (in both the PCL Emulat and PostScript menus) to *OCT No Offset*, and the OCT will not offset jobs.
- Set the Output Bin option to *OCT On Job*, and the OCT will offset jobs from one another.
- Set the Output Bin option to *OCT On Job/Copy*, and the OCT will offset jobs from one another. It will also offset each set of copies of individual pages of an uncollated multiple copy job.

With the OCT installed, the standard output tray still functions normally. The OCT gives you approximately 500 sheets of letter/A4 20 lb (75 g/m^2) maximum collated output. The standard output tray adds another 250 sheets.

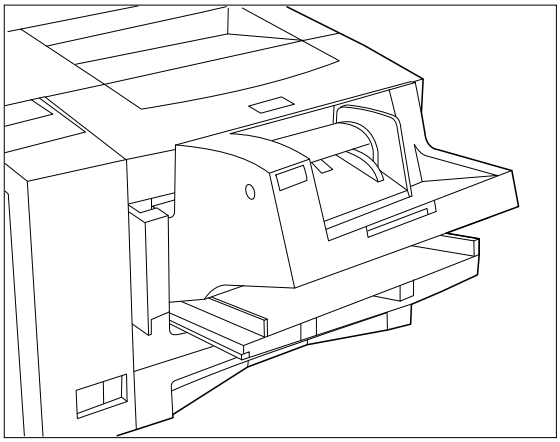
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Using the Envelope Feeder

The Envelope Feeder (Figure 2.7) is an optional paper handling device available for the LN17 printer.

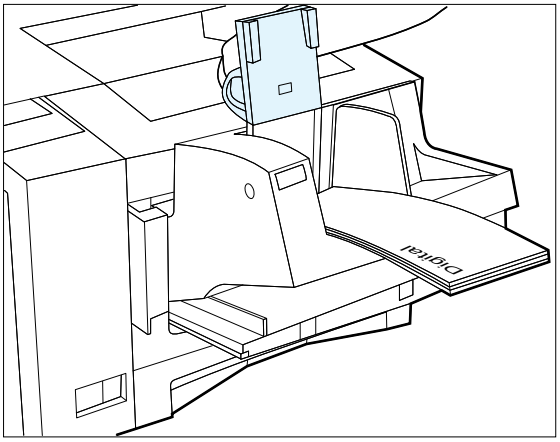
(See *Appendix A* for ordering information and *Appendix B* for installation instructions.)

Figure 2.7 Envelope Feeder (front view)



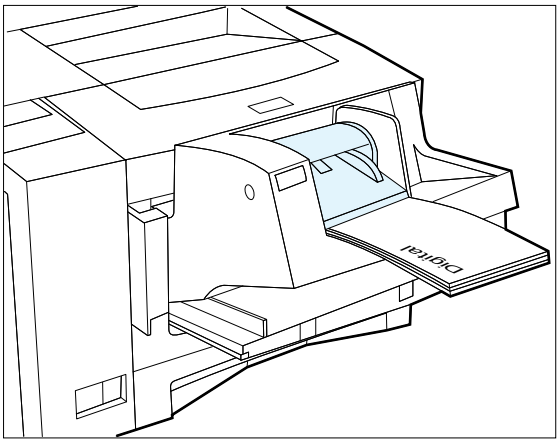
The Envelope Feeder supports all envelope sizes listed in Table 2.1 on page 2-3.

Loading the Envelope Feeder



1 **Lift the envelope holder and stack the envelopes in the feeder.**

Refer to Figure 2.4 on page 2-9 for the proper orientation.



2 **Lower the envelope holder to hold the envelopes firmly in place.**

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Duplex (Two-Sided) Printing

Once the optional Duplex Module is installed, you can print two-sided (duplex) jobs. (See *Appendix A: Ordering Printer Options* for ordering information and *Appendix C: Installing and Removing Printer Options* for installation instructions.)



Note

At least 6 MB of printer memory is recommended (but not required) for duplex printing. See Appendix A for ordering additional memory.

Use only the size paper listed in Table 2.8 for two-sided jobs. Do not use envelopes, postcards, transparencies, or label paper for duplex jobs.

Table 2.8 Paper sizes that can be used with the Duplex Module

Paper Size	Weight
A4 (210x297 mm)	20 lb (75 g/m^2) to 24 lb (90 g/m^2)
Letter (8.5x11 in / 216x279 mm)	20 lb (75 g/m^2) to 24 lb (90 g/m^2)
Folio (Legal 13 in) (8.5x13 in / 216x330 mm)	20 lb (75 g/m^2) to 24 lb (90 g/m^2)
Legal (Legal 14 in) (8.5x14 in / 216x356 mm)	20 lb (75 g/m^2) to 24 lb (90 g/m^2)

Refer to Figures 2.1 (page 2-5) and 2.4 (page 2-9) for the proper orientation of letterhead when printing duplex.

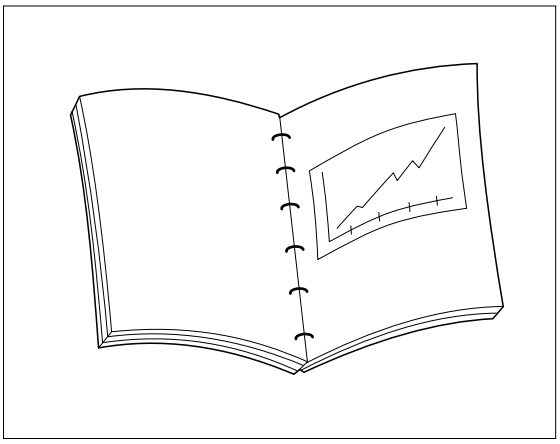
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Print Orientation and Control Panel Settings

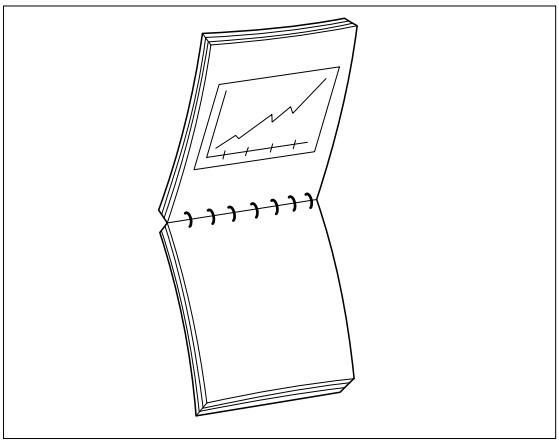
To ensure that duplex jobs print in the proper orientation, set the Duplex option (in the Control Panel's PCL Emulat and PostScript menus) to the appropriate settings (see Figure 2.8). The LN17 printer driver setting should be as follows (identical for PCL and PostScript):

Duplex = *Short Edge*, or
Duplex = *Long Edge*

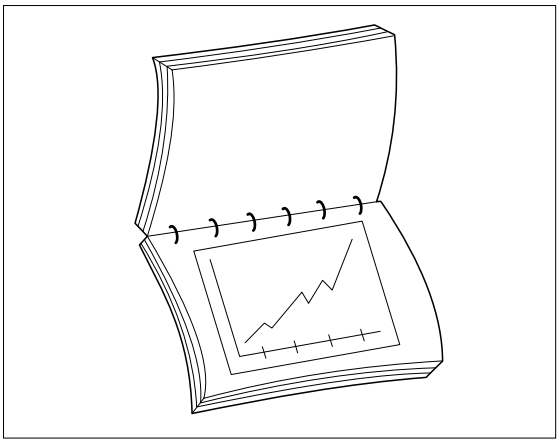
Figure 2.8 Duplex binding orientation and Control Panel menu settings



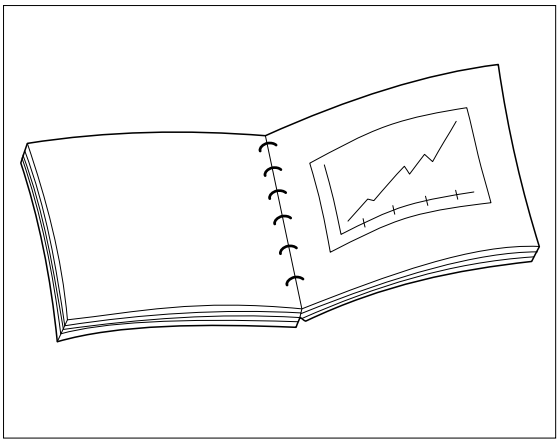
PCL Emulat Menu: set Duplex to *Long Edge Bind*
PostScript Menu: set Duplex to *Regular*



PCL Emulat Menu: set Duplex to *Short Edge Bind*
PostScript Menu: set Duplex to *Tumble*



PCL Emulat Menu: set Duplex to *Long Edge Bind*
PostScript Menu: set Duplex to *Tumble*



PCL Emulat Menu: set Duplex to *Short Edge Bind*
PostScript Menu: set Duplex to *Regular*

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Chapter 3

Using the Control Panel

Control Panel Features ***3-2***

The Display *3-2*

The Keys *3-3*

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System Menu ***3-24***

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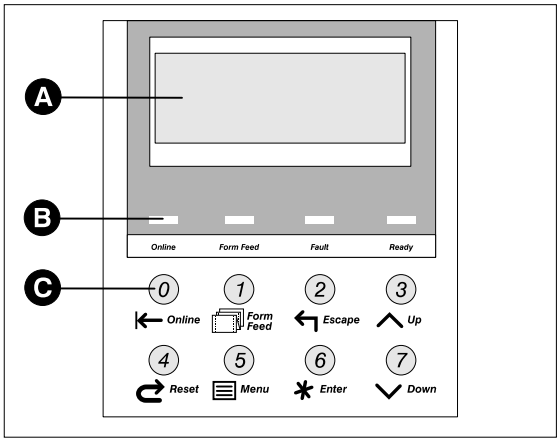
Control Panel Features

The LN17 printer Control Panel (Figure 3.1) serves two purposes:

1. It displays information about the status of the printer (or the job in process) and
2. It provides the means for changing printer settings to control how the LN17 printer operates.

Figure 3.1 LN17 Printer Control Panel

A 2-line by 16-character display
B Indicator lights
C Control keys (8)



The Display

The Control Panel's display performs two functions.

- It informs you of **printer status conditions**, such as when toner is low, when a paper tray is empty, when a job is in process, and so on.

 For example, when you turn on the printer, you see the following message on the display:

  ```
  Online
  Ready
  ```

 This message appears whenever the printer is online and ready to accept print jobs.

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- It presents a **hierarchy of menu options and settings** to configure and control the printer.

 For example, when you press **Menu** after taking the printer offline, you see the following message on the display:

  ```
  Main Menu
  Language >
  ```

 Note that the > in this example is one of three indicators you will see in the menu systems. See *"Menu Indicators"* (page 3-8) for more information on indicators.

 See *"Navigating the Menu System"* (page 3-6) for information on the menu system hierarchy.

The Keys

The Control Panel keypad consists of **eight** keys, identified with international symbols and labeled in English.

The keys are also numbered 0 - 7. When you install the optional Mailbox / Collator, these same eight keys are used to enter numeric passwords for each of the mailbox bins.

Table 3.1 on page 3-4 describes the function of each key.

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Table 3.1 Control Panel keys and their functions

Key	Description
Online	Toggles between **online** and **offline**. When online, the printer is able to receive and print pages. When offline, page processing and printing halts, but the printer is still able to respond to status requests. You must take the printer **offline** to: • Access the menu system with **Menu** or **Reset** .. • Perform tasks such as forcing a form feed for a partially printed page. The printer goes offline automatically when it has a fault condition such as a paper jam or an open cover. Use **Online** to put the printer back online after correcting such conditions.
Reset	Displays the Reset Menu and the first reset function: **Reset Printer**. Press **Up** or **Down** repeatedly to scroll through the other Reset Menu functions. See *"Reset Menu"* (page 3-26). The printer must be offline for **Reset** to function.
Form Feed	Prints a partial page of a PCL emulation job, if one exists in the printer. The printer must be offline for **Form Feed** to function.
Menu	Displays the Main Menu and its first submenu: **Language**. The printer must be offline for **Menu** to function. From any submenu, press **Menu** to go to the top of the Main Menu. See *"Main Menu"* (page 3-11) for a full description.
Esc	In the menu system, exits the current menu level and returns to the previous one. Press **Esc** at any time in the menu system to go to the previous level. No changes to values will be saved unless you first press **Enter** *. Press **Esc** while at Reset Menu (or the top level of Main Menu) to exit either menu.

Table 3.1 Page 1 of 2

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Table 3.1 Control Panel keys and their functions *(continued)*

Key	Description
Enter *	When in the menu system, accesses, sets, or invokes the displayed submenu, value, or function. • When a submenu is displayed, press **Enter** * to access the submenu. • When a printer setting is displayed, such as **Copies**, press **Enter** * to set the current value as the default value. • In PCL emulation, press **Enter** * to override a paper mismatch. • When a printer action is displayed, such as any of the *"Test Menu"* (page 3-25) or *"Reset Menu"* (page 3-26) functions, press **Enter** * to invoke the action. When not in the menu system, acts as a Continue key. • After certain error conditions when **Auto Continue** is *Off*, press **Enter** * to continue the printing process. See *Appendix D: Control Panel Options*, for more information.
Up ^	In the menu system, scrolls backward (up) through submenus or through the current list of values or functions. For numeric values such as number of **Copies**, press **Up** ^ to increase the number. Scrolling wraps—if the first item in a list is displayed, press **Up** ^ to display the last item in the list. Press **Up** ^ for more than two seconds to scroll continuously. When the hard disk option has been installed, press **Up** ^ to respond to a disk failure error message. Pressing **Up** ^ will reformat the hard disk. See *Chapter 6: Troubleshooting* for more information on hard disk failure error messages.
Down v	In the menu system, scrolls forward (down) through the submenus or through the current list of values or actions. For numeric values such as number of **Copies**, press **Down** v to decrease the number. Scrolling wraps—if the last item in a list is displayed, press **Down** v to display the first item in the list. Press **Down** v for more than two seconds to scroll continuously. When the hard disk option has been installed, press **Down** v to respond to a disk failure error message. Hard disk usage will be aborted when **Down** v is pressed. See *Chapter 6: Troubleshooting* for more information on hard disk failure error messages.

Table 3.1 Page 2 of 2

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Navigating the Menu System

The LN17 printer Control Panel contains **two** menu structures.

- **Main Menu** and its submenus:
 - — **Language**
 - — **Mailbox Menu**
 (This menu appears only when the Mailbox / Collator option is installed.)
 - — **PCL Emulat Menu**
 - — **PostScript Menu**
 (This menu appears only when the PostScript option is installed.)
 - — **Interface Menu**
 - — **System Menu**
 - — **Test Menu**

 Press **Online** then **Menu** to access the **Main Menu**. Each of the submenus may have other submenus, settings, or functions. See *"Main Menu"* (page 3-11) for more information.

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- **Reset Menu** and its functions:
 - — **Reset Printer**
 - — **Reset Menus**
 - — **Reset Ethernet**
 (This function appears only when the optional Ethernet card is installed.)
 - — **Reset LocalTalk**
 (This function appears only when the optional LocalTalk card is installed.)
 - — **Reset All**
 - — **Cancel PS Job**
 (This function appears only when the PostScript option is installed and a PostScript job is sent.)

 Press **Online** ⇤ then **Reset** ↵ to access the Reset Menu. See *"Reset Menu"* (page 3-26).

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Menu Indicators

Three menu indicators (>, = and *) are used to furnish information about menus and settings. The purpose of each indicator is described in Table 3.2 below.

Table 3.2 Indicators found in the Control Panel menu systems

Indicator	Purpose	Example
>	Indicates another **menu** level below this one. The example at the right tells you that there is another level below the Language option in the Main Menu. Press **Enter** * to move to the next level.	Main Menu Language >
=	This indicator only appears after options which take a specific setting—it indicates that a value or setting follows the **option.** The example at the right tells you that Language is an option that takes a specific setting. One setting for the Language option is Français. Another setting is English. (The list of available settings is displayed one at a time on the bottom line of the display as you press **Up** ^ or **Down** v.)	Language = Français
*	This indicator identifies the current option **setting**. The example at the right tells you that Language is currently set to English.	Language = English *

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Setting a Menu Option

To set an option, or to invoke a function, follow the steps below:

1 **Press Online ⇤ to take the printer offline.**

You will see:

```
Offline      _/_
Press a key...
```

2 **Press Menu ▤ to access the Main Menu or press Reset ⇄ to access the Reset Menu.**

3 **Press Down ⌄ or Up ⌃ to scroll through the list of submenus, options, or functions.**

4 **When you see the submenu, option, or function you want, press Enter * .**

If you selected a submenu or option you did not want, press **Esc** ↰ to return to the previous level. Then make the selection you want and press **Enter** * to accept it.

5 **If necessary, repeat Step 3 and Step 4 to go through submenu levels to reach all desired options or functions.**

If many possibilities exist, such as 1 through 99 for number of **Copies**, you can scroll quickly by holding down the key.

After pressing **Enter** * to accept a setting, you will briefly see on the top line of the display:

```
* saved *
```

This indicates the value has been saved as the current setting.

6 **You may either continue to work in the menu system by repeating the steps above, or exit and return to normal operation by pressing Online ⇤.**

If you press Online ⇤ before Enter * the value will not be saved.

Other ways to exit a menu option or exit the menu system completely are as follows:

- In the Main Menu, press **Menu** ▤ to return to the top of the **Main Menu**.
- Press **Esc** ↰ from the **Main Menu** or **Reset Menu** to exit the menu system and display the following message:

```
Offline      _/_
Press a key. . .
```

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Main Menu

The Main Menu is a cascading system of submenus, each containing other submenus or options designed to configure the printer for your environment. The Main Menu hierarchy is depicted in Figure 3.2.



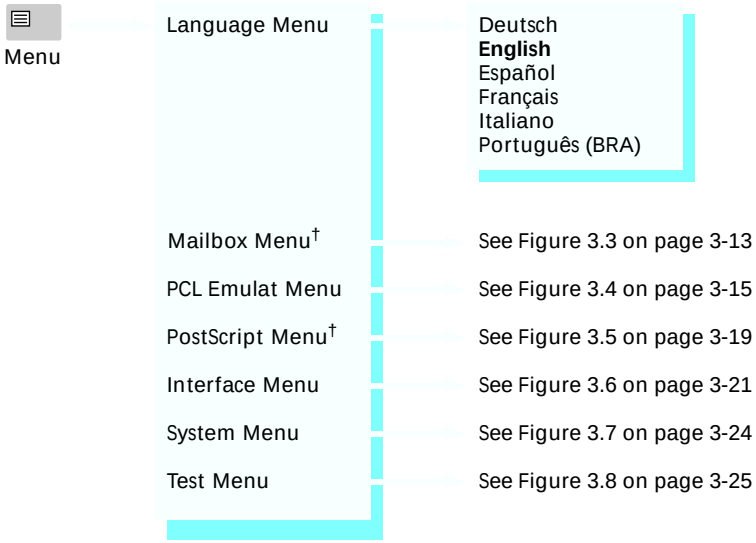
Note

In this chapter, a boldfaced menu item means it is a factory setting. A menu item followed by an asterisk () means a reset will default to this value.*

On the Control Panel, the current setting for each option always appears first and is followed by an asterisk (). The other possible settings are located by pressing* **Up** ^ *or* **Down** v *to scroll through the list.*

See "Reset Menu" (page 3-26) for information on how to revert to factory settings.

Figure 3.2 Main Menu hierarchy



† Appears only when the option is installed.

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Language Menu

The setting for Language Menu determines which language is used to display messages on the Control Panel and to print text on the Configuration Sheet and PCL Font List.

Table 3.3 shows the Language Menu options and their English equivalent. See *"Setting a Menu Option"* (page 3-9) for the steps to find and change the language setting.



Note

The setting for Language Menu does not revert to the factory setting when you initiate a Reset Menu option.

Table 3.3 Language Menu options

Option	English Equivalent
Deutsch	German
English	International English
Español	Spanish
Français	French
Italiano	Italian
Português (BRA)	Brazilian Portuguese

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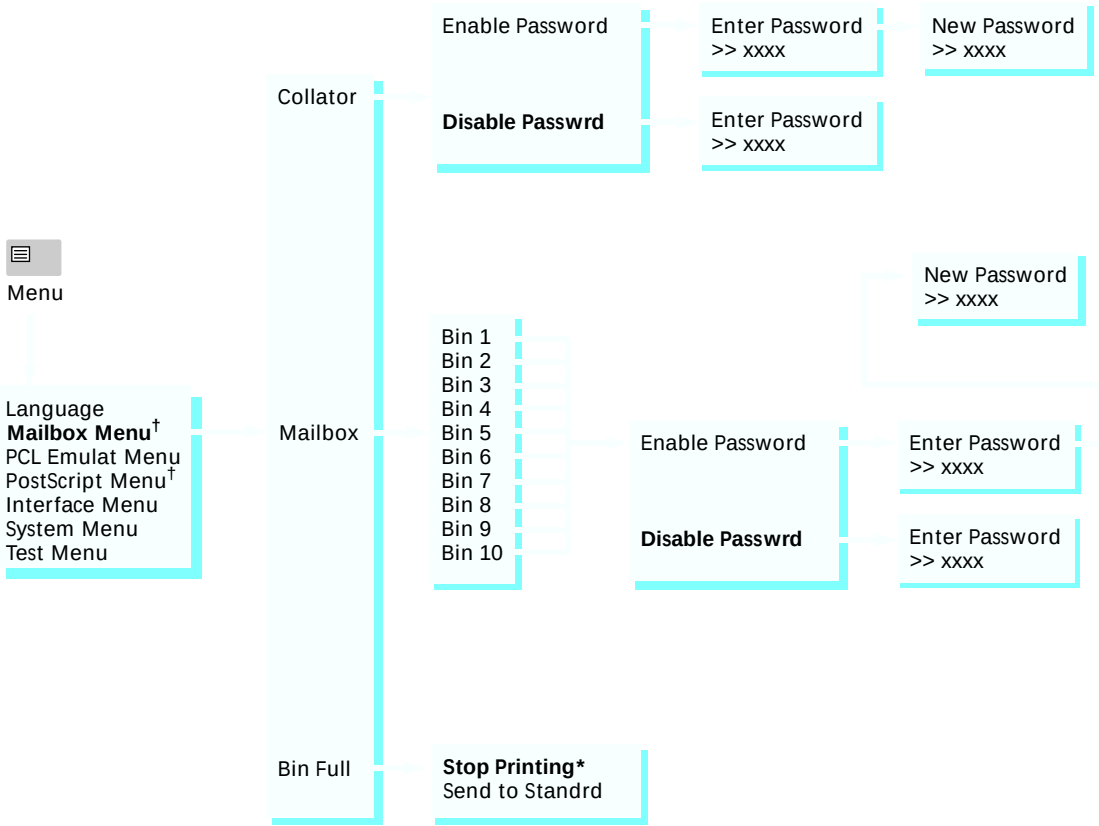
Mailbox Menu

Mailbox Menu options allow you to enable and disable passwords for individual mailbox bins and for the collator.

The Mailbox Menu hierarchy is depicted in Figure 3.3.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

Figure 3.3 Mailbox Menu hierarchy showing factory setting



† Appears only when the option is installed.

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PCL Emulat Menu

PCL Emulat Menu options establish the default configuration for the printer when printing PCL emulation jobs.

You may use your software application to override default settings for certain PCL Emulat Menu options. Table 3.4 lists the options whose settings you may normally override.

Table 3.4 PCL Emulat Menu settings normally overridden by the settings in the data stream

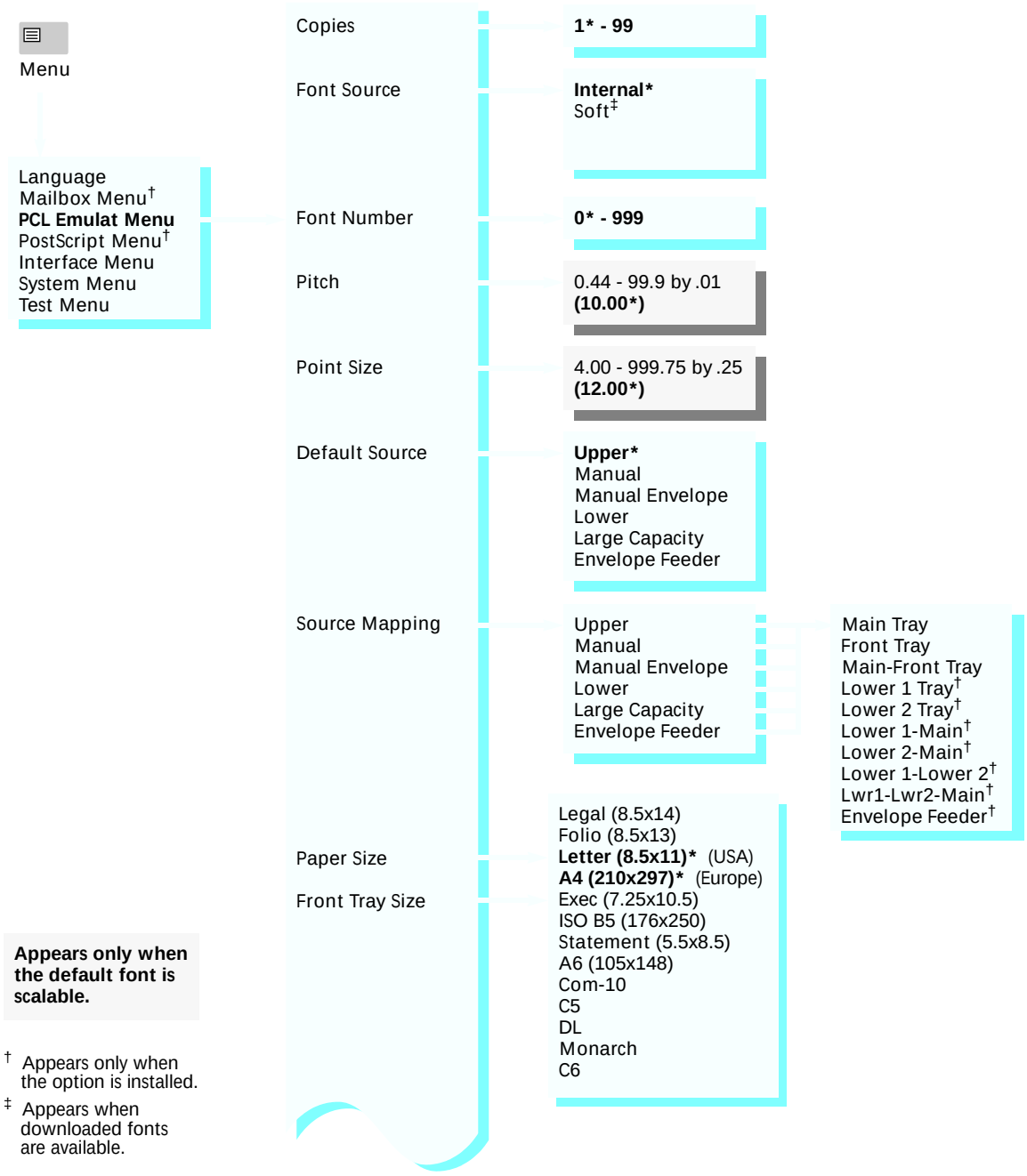
The setting you choose in your software application for:	...will override the PCL Emulat Menu setting for:
Copies	Copies
Duplex	Duplex
Edge to Edge	Edge to Edge
Font	Font Source Font Number Symbol Set
Font Size	Pitch Point Size
Output Bin	Output Bin
Paper Source	Default Source
Paper Size	Paper Size Form Length
Paper Orientation	Orientation
Page Protection†	Page Protection
Print Resolution†	Resolution

† You can change the setting for this feature through your software application only when using the Digital printer driver.

The PCL Emulat Menu hierarchy is depicted in Figure 3.4 starting on page 3-15. (Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

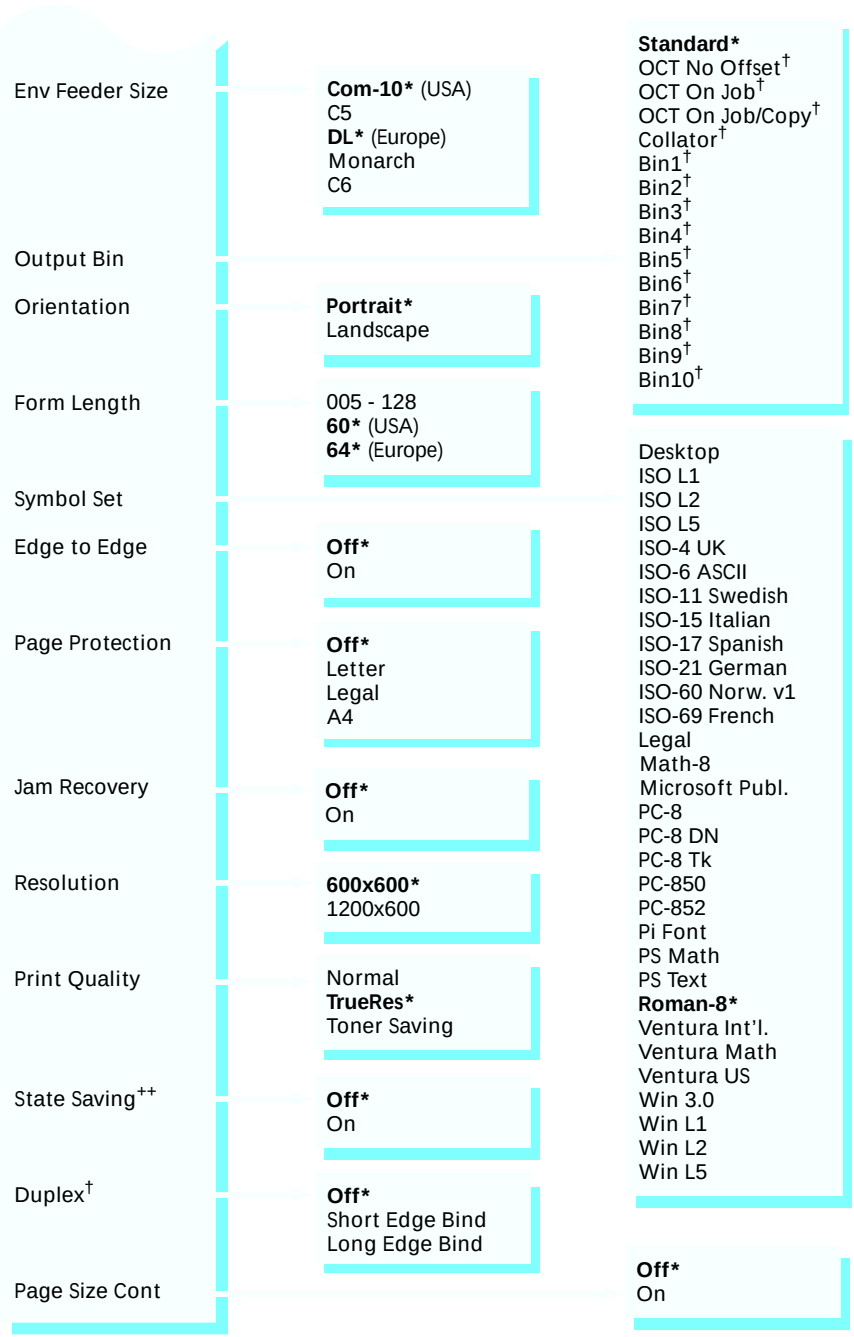
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Figure 3.4 PCL Emulat Menu hierarchy showing factory settings



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Figure 3.4 PCL Emulat Menu hierarchy showing factory settings *(continued)*



† Appears only when the option is installed.

++ Appears only with enough memory or a hard disk installed.

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PostScript Menu

PostScript Menu options establish the default configuration for the printer when printing PostScript jobs. PostScript may be used by software applications to send information and instructions to the printer.



Note

PostScript is available as an option for the LN17 printer. See Appendix A: Ordering Printer Options.



Note

Windows Users:

The Windows PostScript driver for the LN17 printer allows the user to either download the PostScript header with every job or download it only once. If the printer is used in a network or other shared environment where both PCL emulation and PostScript jobs are printed, the header will be deleted when the printer switches from PostScript to PCL emulation.

- *Banner sheets printed from Novell networks cause the printer to switch between PostScript and PCL emulation. If banner sheets are printed, ensure that the Language Sensing option is set to* ON *and the default System Language (for each enabled port) is set to* PCL Emulation.
- *To avoid the loss of the PostScript header:*
 — select Download Each Job *in the PostScript driver, or*
 — set State Saving *to* On *in the PostScript Menu.*
 You must download the header at least once for each power on cycle. If several different PostScript applications are used, the "Download Each Job" option will guarantee that the correct header is always available.



Note

Macintosh Users:

The Macintosh driver is installed by opening the driver disk and double-clicking the OnPAGE installer icon.

You may use your software application to override default settings for certain PostScript Menu options. Table 3.5 lists the PostScript Menu options whose settings you may normally override.

Table 3.5 PostScript Menu settings normally overridden by the setting in the data stream

The setting you choose in your software application for:	...will override the PostScript Menu setting for:
Copies	Copies
Duplex	Duplex
Paper Source	Default Tray
Paper Size	The size paper currently in the default tray
Print Resolution†	Resolution
Print Quality†	Print Quality

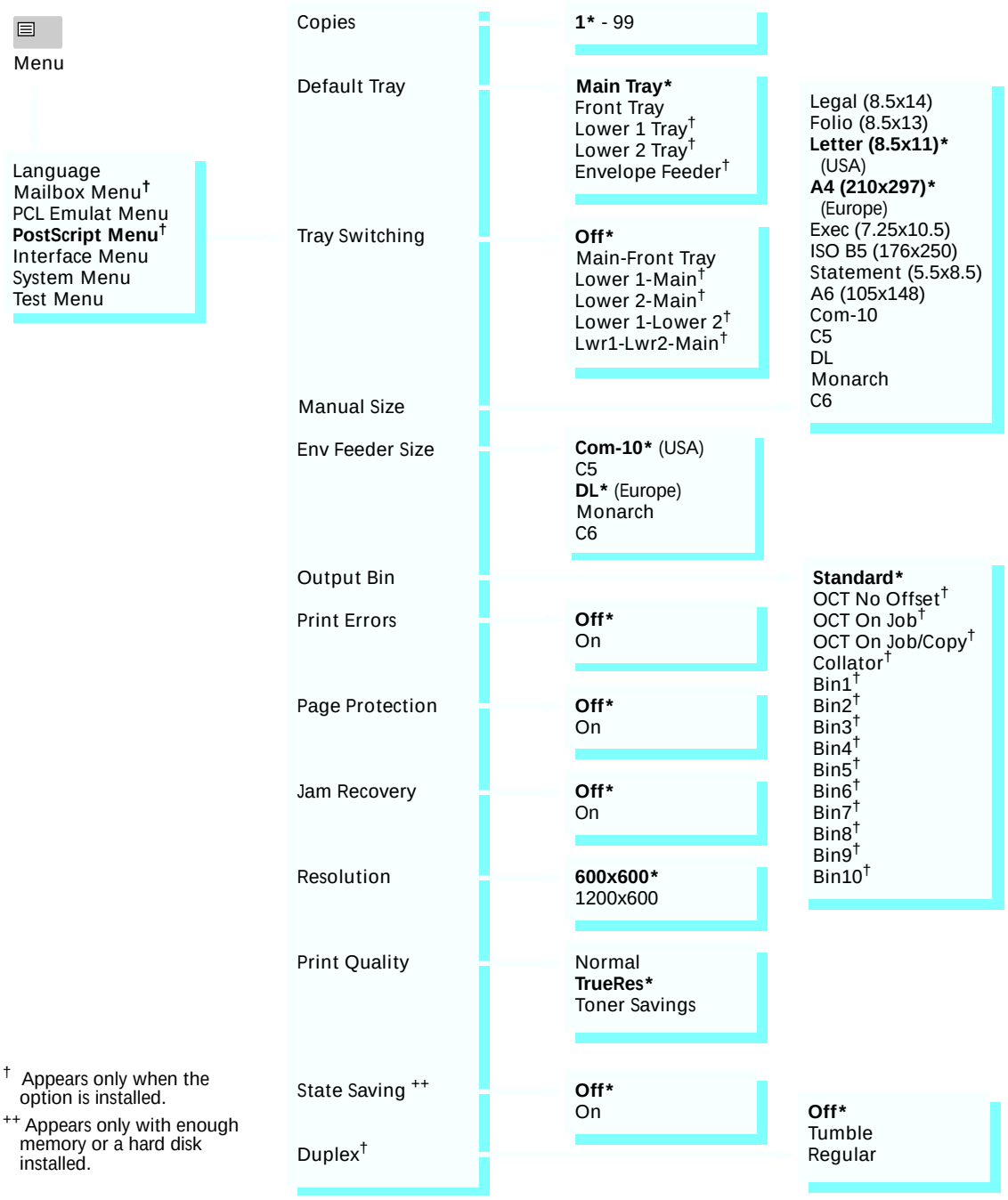
† You can change the setting for this feature through your software application only when using a Digital LN17 printer driver.

Figure 3.5 on page 3-19 shows the PostScript Menu hierarchy. The PostScript Menu appears only when the PostScript option is installed.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

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Figure 3.5 PostScript Menu hierarchy showing factory settings



† Appears only when the option is installed.

++ Appears only with enough memory or a hard disk installed.

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Interface Menu

The Interface Menu contains submenus for the parallel port on the printer. It also includes submenus for network interface ports *when one or more network interface cards are installed*.

The Interface Menu may include submenus for the following:

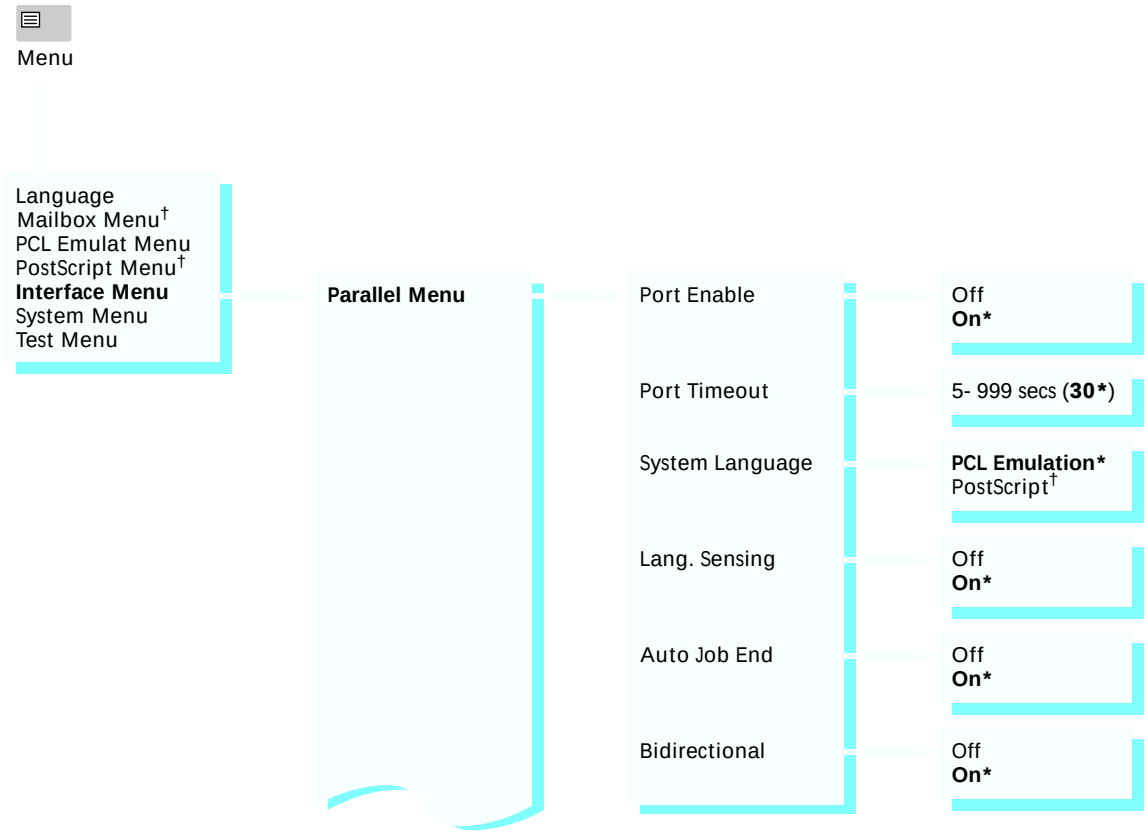
- **Parallel Menu** (see page 3-21)
- **LocalTalk Menu** (see page 3-22)
- **Ethernet Menu** (see page 3-22)

Figure 3.6 starting on page 3-21 shows the Interface Menu hierarchy.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

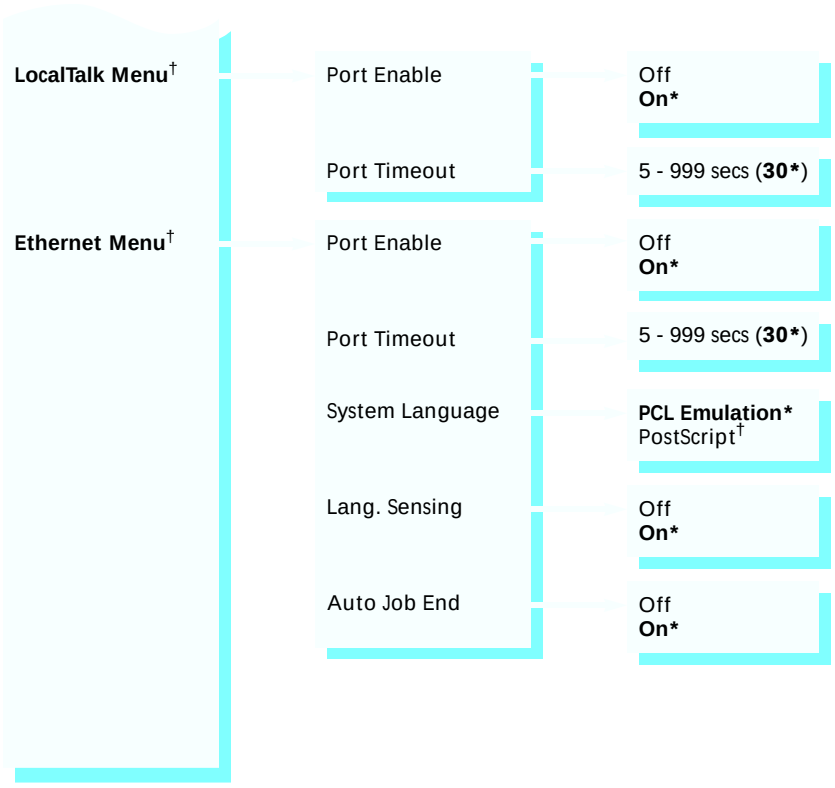
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Figure 3.6 Interface Menu hierarchy showing factory settings



† Appears only when the option is installed.

Figure 3.6 Interface Menu hierarchy showing factory settings *(continued)*



† Appears only when the option is installed.

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LocalTalk Menu Options

The LocalTalk Menu, a submenu of the Interface Menu, contains options for configuring the printer's LocalTalk port when the LocalTalk option (DNIC-L'TALK) has been installed.

For detailed information on the DNIC-L'TALK, refer to the *DNIC-L'TALK Configuration Guide* in the DNIC-L'TALK option kit.

Ethernet Menu Options

The Ethernet Menu, a submenu of the Interface Menu, contains options for configuring the printer's Ethernet port when the Ethernet option (DNIC-E'NET) has been installed.

The Ethernet option supports the following protocols:

- Novell NetWare, Version 2.x, 3.x, and 4.x (BEM)
- TCP/IP
- EtherTalk
- LAT
- Microsoft Windows NT
- SNMP

For more information on the supported protocols, refer to the *DNIC-E'NET Configuration Guide* in the DNIC-E'NET option kit.

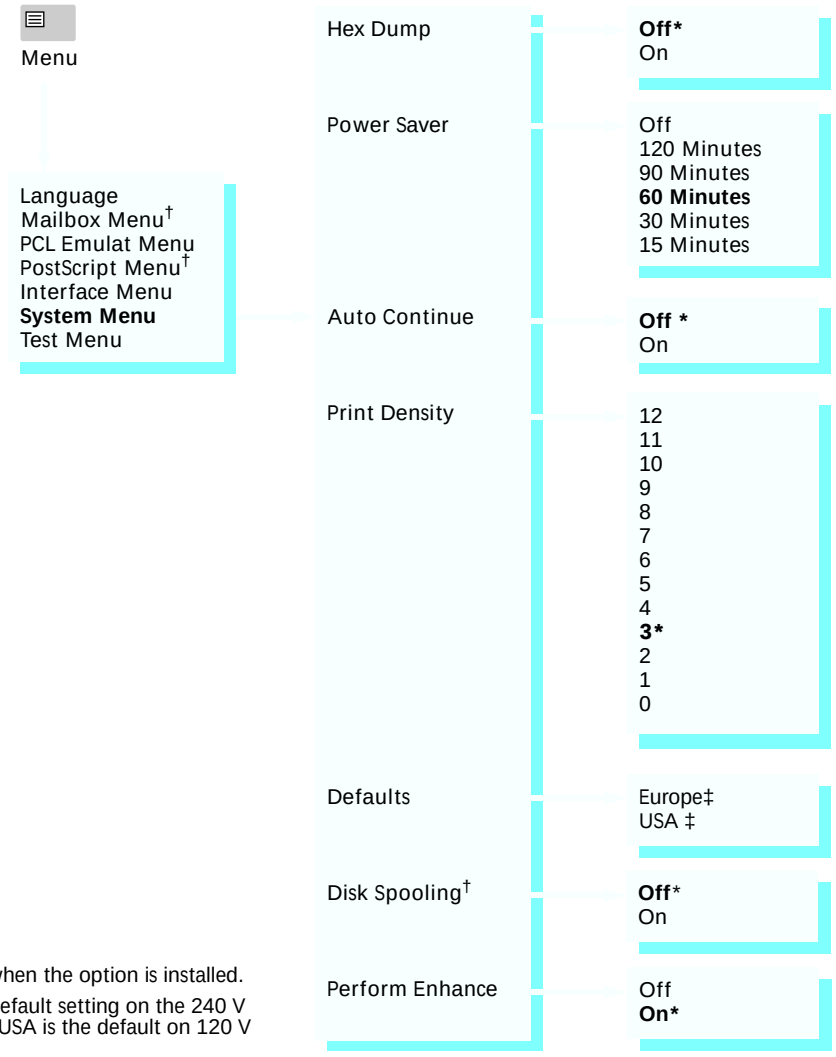
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System Menu

The System Menu options set general printer features. Figure 3.7 highlights the System Menu hierarchy.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

Figure 3.7 System Menu hierarchy showing factory settings



† Appears only when the option is installed.

‡ Europe is the default setting on the 240 V machines and USA is the default on 120 V machines.

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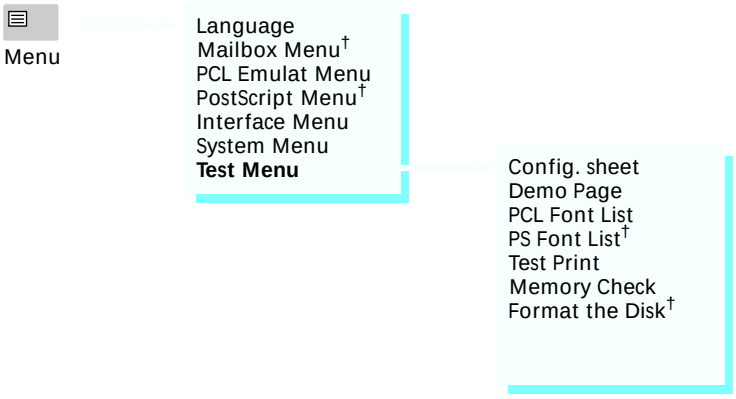
Test Menu

Test Menu options are used to generate printer reports. All options other than Memory Check cause the printer to generate a printed report. (Results of the Memory Check are displayed on the Control Panel.)

Figure 3.8 shows the Test Menu hierarchy.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)

Figure 3.8 Test Menu hierarchy



† Appears only when the option is installed.

Caution

Never generate a printer report or a memory check while the printer is busy. This will cause the printer to reset to its power-on state. As a consequence, you will lose all or part of the job currently being processed and any temporary fonts/macros downloaded to printer memory.

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Reset Menu

The Reset Menu is used to reset various printer functions. Selecting Reset Printer resets the printer to its power-on state, while Reset Menus resets the menu settings to their factory settings. Selecting Reset Ethernet or Reset LocalTalk resets the respective network interface card to its power-on state.

Figure 3.9 shows the Reset Menu hierarchy.

(Menu options are described in *Appendix D: Control Panel Options*, where they are listed in alphabetical order.)



Note

The printer clears downloaded fonts and print macros from RAM, and ejects any partially printed pages when you select Reset Printer, Reset Menus, or Reset All.

Figure 3.9 Reset Menu hierarchy



† Appears only when a Digital Network Interface Card is installed.

†† Appears only when the PostScript option is installed.

Chapter 4

LN17 Printer Driving Software

LN17 PCL 5e Emulation Printer Drivers *4-2*
LN17 PostScript Printer Drivers *4-3*
DECprint Supervisor (DCPS) Software *4-4*

LN17 PCL 5e Emulation Printer Drivers

The base LN17 printer supports the PCL printer drivers listed in Table 4.1. To take full advantage of all the printer's features when printing PCL jobs, install the appropriate LN17 PCL 5e emulation printer driver(s). (Consult your operating system user manual for instructions on installing a new printer driver.)

Table 4.1 LN17 PCL 5e Emulation printer drivers

Environment	Printer Driver	Diskette
DOS†	Microsoft Word Ver. 6.0	Printer Drivers for MS-DOS
	WordPerfect Ver. 6.0	Printer Drivers for MS-DOS
	AutoCAD Rel. 12, 13	Printer Drivers for MS-DOS
Windows	Windows 3.1 / Windows 95	PCL5e Emulation Printer Driver for Microsoft Windows 3.1 and Windows 95
	Windows NT 3.5	PCL5e Emulation Printer Driver for Microsoft Windows NT

† If you are using a DOS application other than Microsoft Word, WordPerfect, or AutoCAD, use the HP LaserJet 4si printer driver supplied with your application software.

LN17 PostScript Printer Drivers

The PostScript option supports the PostScript drivers listed in Table 4.1. To take full advantage of all the printer's features when printing PostScript jobs, install the appropriate LN17 PostScript printer driver(s). Consult your operating system user manual for instructions on installing a new printer driver.

Table 4.2 LN17 PostScript printer drivers

Environment	Printer Driver	Diskette
Windows	Windows 3.1 / Windows 95	PostScript Printer Drivers for Microsoft Windows 3.1 and Windows 95
	Windows NT 3.5	PostScript Printer Driver for Microsoft Windows NT
Macintosh	System 6.x	PostScript Printer Driver and Utilities for Macintosh
	System 7.x	PostScript Printer Driver and Utilities for Macintosh

DECprint Supervisor (DCPS) Software

DECprint Supervisor (DCPS) for OpenVMS is a family of layered products that run on OpenVMS VAX and OpenVMS Alpha systems to provide access to selected PostScript Level 1 and Level 2 print devices.

The DCPS software and documentation are available in the standard OpenVMS CDROM libraries, and may also be ordered separately from Digital.

The license rights to use the basic printing features of DCPS with Digital PostScript printers are included with the OpenVMS operating system.

You can find more information about the DCPS products, including pricing and support of optional features, and ordering information, in the *DECprint Supervisor (DCPS) for OpenVMS Software Product Description (AE–PUM0*–TE).*

For DCPS installation information, refer to the *DECprint Supervisor for OpenVMS Software Intallation Guide*.

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Chapter 5

Using the Hard Drive/ Downloading Fonts

Hard Drive Considerations **5-2**
Print/Disk Spooling *5-2*
State Saving *5-2*
Formatting the Hard Drive *5-3*
Downloading Fonts and Macros **5-4**

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Hard Drive Considerations

If you install the optional hard drive on the LN17 printer, it will significantly increase the amount of memory available for processing jobs and storing downloaded information (such as fonts and macros).

Print/Disk Spooling

The hard drive can function as a print spooler when you set the `Disk Spooling` option to *On*. With disk spooling enabled, the hard drive simultaneously accepts print jobs from all enabled ports, then processes and prints them in the order in which they are first received.

Disk spooling is useful for both standalone and networked systems:

- When the printer is busy processing a long or complex print job, successive print jobs from the same or other ports can be accepted by the printer and spooled to the hard disk. Accordingly, the printer will free the computer that is submitting print jobs so it can subsequently switch to tasks other than printing.
- While most networks provide spooling outside the printer, spooling to a disk inside the printer will remove network related overhead. Accepting print jobs from a disk in the printer is more efficient than accepting print jobs one at a time from networks.

The number of jobs that can be spooled is limited by the amount of hard drive space available. Also, spooling from networks will not be supported for AppleTalk jobs and from ports where DS/P (Document Services for Printing) is enabled. The DECprint Supervisor (DCPS) for OpenVMS software does not support spooling.

State Saving

When the `State Saving` option is set to *On*, the printer saves downloaded information when it switches between the PCL and PostScript PDLs (Printer Description Language). Installing a hard drive increases the amount of memory the printer has available for saving downloaded fonts and macros when it switches between PDLs.

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Formatting the Hard Drive

When a new unformatted hard disk drive is installed in the printer, it must be formatted before it will be available for use. Formatting can be done when the printer is powered on after the installation.

The disk can be reformatted at any time. This is useful when it is desired to erase everything on the disk—all fonts, macros, and spooled print data. Also, in the unusual case of a problem with the disk, it may be desirable to reformat it, again at the expense of erasing everything on it.

Formatting is accomplished by selecting the `Format the Disk` option in the Test Menu. You will be warned of losing data and asked two times to confirm the formatting by pressing Up ^.

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Downloading Fonts and Macros

Digital LN17 printer drivers provide you with the ability to download fonts and PCL 5e macros to the printer.

Fonts can be downloaded to printer memory or to the optional hard drive. Macros can be downloaded to printer memory or the optional hard drive.

- To download fonts, you must first install the appropriate LN17 Windows 3.1/Windows 95, Macintosh, Windows NT, or UNIX drivers. To download macros, you must install the LN17 Windows PCL 5e driver.

 The DECprint Supervisor (DCPS) for OpenVMS software includes a sample Digital Command Language (DCL) procedure that you can use to add, list, and remove Postscript fonts from the printer's hard drive. SYS$COMMON:[SYSHLP.EXAMPLES.DCPS] - FONT_DOWNLOADER.COM is this procedure.

- Fonts and macros downloaded to the hard drive are stored on the hard drive until you delete them. Turning the printer power off does not clear these fonts/macros from the hard drive.

 You can only delete a macro from the hard drive if you know the name of the macro. You should therefore keep a record of downloaded macros. (You cannot print out a list of macros.).

- "Temporary" fonts/macros downloaded to printer memory, on a job basis, are cleared from the printer's memory after each job.

- "Permanent" fonts downloaded to printer memory are cleared from the printer's memory whenever the printer is powered off, and when the printer switches PDLs and the `State Saving` option is set to *Off*.

 (When `State Saving` is set to *On*, "permanent" fonts/ macros are only cleared from printer memory when you turn off the printer.)

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Chapter 6

Troubleshooting

Printer Operation Problems ***6-2***

Control Panel Messages ***6-6***

Paper Jams ***6-26***

What Causes a Paper Jam? *6-26*

Clearing Paper Jams *6-26*

Print Quality Problems ***6-33***

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Printer Operation Problems

Consult Table 6.1 starting on page 6-3 for corrective actions when the printer will not print or when the printed output is not what you expect.

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Table 6.1 Printer operation problems

Problem	Action
The printer will not print.	1. Power the printer OFF, then ON. 2. Print a Configuration Sheet. • If it prints, the printer is okay. • If it does not print, contact your dealer or Digital.
A file sent from the host does not print.	1. Make sure the printer is online. 2. Send a plain text file (i.e., one without printing commands embedded in it) to the printer. • If the file prints correctly in the default font, with all of the characters in the original file, the printer is seeing the same data that the host is sending, and the interface or communication line is functioning correctly. • If no data prints (or the last page indicator does not come on): A. Make certain the printer is configured properly. B. The port (parallel or network) may be disabled on the printer. Check the Configuration Sheet for the port you are using to see if the Port Enable option in the appropriate Interface Menu is set to *On*. If it is set to *Off*, set it to *On* and try again. C. If using an optional Digital Network Interface Card (DNIC) for Ethernet or LocalTalk, check the Configuration Sheet to see if the printer is acknowledging that the DNIC is present. (Refer to DNIC installation instructions in *Appendix C: Installing and Removing Printer Options*.) • If the Configuration Sheet shows the DNIC as "failed," or does not show the DNIC as present, power OFF the printer and unplug it. Pull out the controller board, remove the DNIC, and check that the connector pins are not bent. If bent, straighten. Reseat the DNIC securely, put the controller board back in the printer, power ON and print another Configuration Sheet. If the Configuration Sheet still shows the DNIC as "failed," the DNIC has failed. If the Configuration Sheet still does not show the DNIC as present, then either the DNIC has failed or the interface between the DNIC and the printer controller has failed. Contact your dealer or Digital. • If the Configuration Sheet shows the network card as present, check if the printer is recognized by the host. (Refer to the Troubleshooting chapter of the respective DNIC Configuration Guide.) D. If there is garbled data, check the Configuration Sheet to confirm that the correct emulation is selected or that the Language Sensing option is set to *On*.

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Table 6.1 Printer operation problems *(continued)*

Problem	Action
A printed page does not look like it should.	1. Make certain that the software application you are using to create your print job is configured properly. Refer to your software documentation. 2. Send a file containing PCL or PostScript commands to the printer. • If your page prints as it should, your printer and interface are functioning properly. • If your information prints correctly, but doesn't look right, you may have: • An error in your command sequence/operator • A missing downloaded font • A mismatched printer option against your host formatting • Command errors may be identified by looking at your input file or by using the Hex Dump feature on the printer. You can determine which fonts are in the system by printing a PCL or PS Font List. You can verify your data setup by printing a Configuration Sheet and checking your printer setup.
The requested font for the PCL job does not print.	Print a PCL Font List. If fonts print on the Font List, your print job may need correcting.
PostScript commands are printed instead of the PostScript job.	1. Make certain that the software application you are using to create your job is configured properly. Refer to your software documentation. 2. If the Lang. Sensing option in the appropriate Interface Menu is set to *On*, the job sent to the printer might have included an incorrect header and therefore not have indicated that a PostScript job was being sent. • Set the System Language option in the appropriate Interface Menu to *PostScript* and try sending the job again. • Check your software to make sure the PostScript header file is being sent to the printer.
A PostScript job does not print in the requested font.	Check the spelling of the requested font in your PostScript file. Many times a typo is the problem. If the font is spelled correctly, print a PS Font List to check if the font is present. If it is not, download the font and resend the job.
The bottom edge of the page is cut off, or there are white bands.	For PCL jobs, set the Page Protection option in the PCL Emulat Menu to the size of the paper for the job (or to the next larger size). For PostScript jobs, set the Page Protection option in the PostScript Menu to *On*.
A PCL job prints, but the edges are cut off.	Set the Edge to Edge option in the PCL Emulat Menu to *On*.
	Table 6.1 Page 2 of 3

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Table 6.1 Printer operation problems *(continued)*

Problem	Action
A PostScript job fails to print.	1. Check that PostScript is installed; also check that you are using an LN17 PostScript printer driver. 2. If the Lang. Sensing option in the appropriate Interface Menu is set to *On*, set the System Language option to *PostScript* and re-send the job. 3. Set the Print Errors option in the PostScript Menu to *On* and resend the job. • If an error page prints, there is a problem in the PostScript coding. Correct the coding problem and resend the job. • If the job does not print and no error page was printed, set the Page Protection option in the PostScript Menu to *Off*. • If the job still does not print, the job may require additional memory.
Jobs printed from the front tray are skewed with respect to the sheet/envelope.	Check the side guide to be sure that it is snug against the right side of the sheet but not so tight as to buckle it.
	Table 6.1 Page 3 of 3

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Control Panel Messages

Listed in Table 6.2 are Control Panel messages that either:

- Cause the printer to stop printing.
- Require the user to call for service.

Also included in Table 6.2 are common, non-error messages you are likely to see. The messages are listed in alphabetical order, preceded by numerical diagnostic error codes.

Table 6.2 Control Panel messages

Message	Description/Corrective Action
0001† † Appears in the upper left corner of the display.	A fault condition has occurred. ACTION: Reseat the controller board and test the printer again. If the problem continues, reseat the ROM SIMM(s) on the controller board and test the printer again. If the problem still continues, observe the diagnostic LED at power on. If the LED does *not* glow, or glows continuously, contact your dealer or Digital. If the LED flashes, refer to Table 6.3 on page 6-25 for further information.
0040† † Appears in the upper left corner of the display.	A fault condition has occurred. ACTION: Reseat the controller board and test the printer again. If the problem continues, observe the diagnostic LED at power on. If the LED does *not* glow, or glows continuously, contact your dealer or Digital. If the LED flashes, refer to Table 6.3 on page 6-25 for further information.
0100† † Appears in the upper left corner of the display.	A fault condition has occurred. ACTION: If there is a memory SIMM in slot SIM3, remove it. Move the memory SIMM in slot SIM2 into SIM3, then test the printer again. If code 0101 is displayed at power on, replace the SIMM. If code 0101 is not displayed at power on, move the SIMM back to SIM2 and test the printer again. If code 0100 again displays at power on, contact your dealer or Digital.
0101† † Appears in the upper left corner of the display.	A fault condition has occurred. ACTION: If there is a memory SIMM in slot SIM2, remove it. Move the memory SIMM in slot SIM3 into SIM2, then test the printer again. If code 0100 is displayed at power on, replace the SIMM. If code 0100 is not displayed at power on, move the SIMM back to SIM3 and test the printer again. If code 0101 again displays at power on, contact your dealer or Digital.
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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`*****`	The printer is in power on diagnostics. ACTION: None, if there is no failure during power on diagnostics. After other diagnostic messages, the final message will be the one that the printer is online and waiting for data.
`Clear Paper Path`	A paper jam has occurred. The message alternates with a message that specifies the location of the jam. ACTION: See Table 6.4 on page 6-27.
`Close Bin N`	The bin numbered *N* is pulled out. ACTION: Close the bin.
`Close Bins`	Two or more bins are pulled out. ACTION: Close the bins.
`Close Covers`	Either the front or rear cover (or both) is open. ACTION: Close the cover, and press **Online** ← to resume normal operation.
`Comm. Error`	The printer is not able to communicate with the host using bidirectional parallel. ACTION: Check the parallel cable to make sure it is connected properly on both the printer and the host. Inspect the parallel cable for any defects; if wires are broken or the cable appears to be damaged, replace the cable. Check the host to be certain that it is configured properly. Under the Parallel Menu, turn the **Bidirectional** option to *Off* if your host's parallel port is not bidirectional. If problem persists, contact your dealer or Digital.
`Comm. Error:nn`	A LocalTalk error has occurred. *nn* is the AppleTalk error number.
`Config. Sheet Printing...`	The Configuration Sheet is printing. See the **Config. sheet** option, page D-4. ACTION: Remove the Configuration Sheet from the output tray when it has finished printing.
`Confirm: OK To Lose All Data`	Second level warning message prior to formatting the hard disk. ACTION: Press **Up** ^ to format the disk or press **Down** v to abort.
`Demo Page Printing…`	The Demo Page is printing. ACTION: Remove the Demo Page from the output tray when it finishes printing.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Disk`	A hard disk error has occurred. ACTION: Power cycle the printer. If this message reappears, power off the printer and contact your dealer or Digital.
`Disk Failure`	A general failure of the hard disk has occurred. Under this message, the following message is displayed: `Press *` ACTION: Press **Enter** * . The printer displays the following message: `Disk Not In Use` Printing resumes without use of the hard disk.
`Disk Format Bad`	The hard disk high level format (FAT tables) cannot be understood. This is NOT because a new disk has been installed. ACTION: Either initialize the disk format procedure by pressing **Up** ^ , or abort the procedure by pressing **Down** v . This message flashes alternately with the two-line message: `Press ↑ to init` `Press ↓ to Abort`
`Disk Not In Use`	A failure of the hard disk has occurred and been acknowledged. Printing resumes without use of the hard disk. ACTION: Make sure the hard disk is properly seated on the controller board. If the problem remains, contact your dealer or Digital.
`Disk Read Error`	The printer cannot read data from the hard disk. ACTION: Try powering the printer OFF then ON again. Make sure the hard disk is properly seated on the controller board. If the problem remains, contact your dealer or Digital.
`Disk Write Error`	The printer cannot write data to the hard disk. ACTION: Press **Enter** * . The printer will mark the disk sector as bad and retry the write operation at another location on the disk. Make sure the hard disk is properly seated on the controller board. If the problem remains, contact your dealer or Digital.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Duplex Unit Fail`	The Duplex Module has failed. Duplex (two-sided) printing cannot continue. You can, however, still print simplex (single-sided) prints. ACTION: Remove and reinstall the Duplex Module following the instructions in *Appendix C: Installing and Removing Printer Options*. If it still fails, contact your dealer or Digital.
`Enter Password` `>> xxxx`	The bin unlock button has been pressed on the Mailbox/Collator and a password has been enabled. ACTION: Enter the password for the bin or collator that you wish to open. This message can also occur while enabling a password for a bin or the collator. ACTION: Enter the password used last time that bin or collator had its password enabled (or the factory default password the first time). Then you will be allowed to proceed with enabling the password.
`Envelope Feeder`	Envelopes need to be loaded in the Envelope Feeder. ACTION: The message on the bottom line of the Control Panel display advises what envelopes to load.
`Env Feeder Empty`	The Envelope Feeder is empty. ACTION: Load envelopes in the Envelope Feeder.
`Env. Feeder Fail`	The Envelope Feeder has failed. Printing from the Envelope Feeder cannot continue. ACTION: Remove and reinstall the Envelope Feeder following the instructions in *Appendix C: Installing and Removing Printer Options*. If it still fails, you still have the option of feeding envelopes through the front tray. Contact your dealer or Digital.
`EnvelFeeder Jam-` `Remove All Envel`	An envelope has jammed feeding from the Envelope Feeder. The message alternates with: `Open Front Cover` `Remove Jam Envel` ACTION: See *"Envelope Feeder Jam"* (page 6-29).
`Ethernet Fail`	The Ethernet card (DNIC-E'NET) has failed and cannot be used. ACTION: Press **Enter** * to allow the printer to continue as if the Ethernet card were not installed. This error is not subject to **Auto Continue** (page D-3). Print a Configuration Sheet. If the sheet does not show Ethernet as present, contact your dealer or Digital.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Fan Failure Power Off NOW!	The printer's fan has failed. ACTION: Power cycle the printer. If this message reappears, power off the printer and contact your dealer or Digital.
Feed A4	ACTION: Feed A4 paper through the front tray, as indicated on the top line of the display.
Feed A6	ACTION: Feed A6 paper (international postcard) through the front tray, as indicated on the top line of the display.
Feed Com-10	ACTION: Feed Com-10 envelope through the front tray, as indicated on the top line of the display.
Feed C5	ACTION: Feed C5 envelope through the front tray, as indicated on the top line of the display.
Feed C6	ACTION: Feed C6 envelope through the front tray, as indicated on the top line of the display.
Feed DL	ACTION: Feed DL envelope through the front tray, as indicated on the top line of the display.
Feed Exec	ACTION: Feed Executive paper through the front tray, as indicated on the top line of the display.
Feed Folio	ACTION: Feed Folio paper through the front tray, as indicated on the top line of the display.
Feed ISO B5	ACTION: Feed ISO B5 paper through the front tray, as indicated on the top line of the display.
Feed Legal	ACTION: Feed Legal paper through the front tray, as indicated on the top line of the display.
Feed Letter	ACTION: Feed Letter paper through the front tray, as indicated on the top line of the display.
Feed Monarch	ACTION: Feed Monarch size envelopes through the front tray, as indicated on the top line of the display.
Feed Statement	ACTION: Feed Statement size paper through the front tray, as indicated on the top line of the display.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Flushing...`	The PostScript print job was cancelled from the Reset Menu and is being parsed out and discarded. ACTION: None.
`Formatting Disk` `Please Wait...`	The hard disk is being partitioned and high level formatted. ACTION: None.
`Front Tray`	Your application specifies "Manual" (or "Front Tray") as the paper source so you need to load paper in the front tray. ACTION: The message on the bottom line of the Control Panel display advises what paper size to load or feed.
`Front Tray Empty`	The front tray is empty. ACTION: Reload the correct size of paper.
`Front Tray Jam-` `Remove All Paper`	Paper has jammed feeding from the front tray. The message alternates with: `Open Front Cover` `Remove Jam Sheet` ACTION: Remove all paper from the front tray, open the front cover and pull out the jammed paper. Then close the front cover and reload the front tray. See *"Front Tray Jam"* (page 6-27).
`Fuser Failure` `Service Required`	The fuser assembly has failed; printing cannot resume. ACTION: Cycle power on the printer. If you have just replaced the Fuser Cartridge, reseat it. If the problem persists, contact your dealer or Digital.
`Hex Dump`	Hex dump mode is *On*. ACTION: None.
`I/O Initializing` `Please Wait...`	The Digital Network Interface Card is being initialized. ACTION: Wait until you see the following message before taking other actions: `Online ___` `Ready`
`Install` `Print Cartridge`	The EP (print) cartridge is missing or not installed correctly. ACTION: Reinstall the existing EP cartridge or install a new EP cartridge. If problem continues, contact your dealer or Digital.

Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Invalid Password	An invalid password has been entered for the mailbox password. ACTION: Re-enter the password when prompted.
IOT NVM Fail Service Required	Nonvolatile Memory (NVM) has failed on the print engine (also called the IOT—Image Output Terminal). Printing cannot resume. ACTION: Contact your dealer or Digital.
Laser Failure Service Required	The laser assembly has failed; printing cannot continue. ACTION: Contact your dealer or Digital.
Last Page	The last page of the document has not finished printing. ACTION: None. The last page will print when the printer receives more data, or when the port times out.
Load A4	ACTION: Load A4 paper into the tray(s) indicated on the top line of the display.
Load A6	ACTION: Load A6 paper (international postcard) into the front tray as indicated on the top line of the display.
Load C5	ACTION: Load C5 envelope(s) into the tray(s) indicated on the top line of the display.
Load C6	ACTION: Load C6 envelope(s) into the tray(s) indicated on the top line of the display.
Load Com-10	ACTION: Load Com-10 envelopes into the tray(s) indicated on the top line of the display.
Load DL	ACTION: Load DL envelopes into the tray(s) indicated on the top line of the display.
Load Exec	ACTION: Load Executive paper into the tray(s) indicated on the top line of the display.
Load Folio	ACTION: Load Folio paper into the tray(s) indicated on the top line of the display.
Load ISO B5	ACTION: Load ISO B5 paper into the front tray as indicated on the top line of the display.
Load Legal	ACTION: Load Legal paper into the tray(s) indicated on the top line of the display.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Load Letter	ACTION: Load Letter paper into the tray(s) indicated on the top line of the display.
Load Monarch	ACTION: Load Monarch size envelopes into the tray(s) indicated on the top line of the display.
Load Statement	ACTION: Load Statement size paper into the front tray as indicated on the top line of the display.
LocalTalk Fail	The LocalTalk card (DNIC-L'TALK) has failed and cannot be used. ACTION: Press **Enter** * to allow the printer to continue as if the LocalTalk card were not installed. This error is not subject to **Auto Continue**. Print a Configuration Sheet. If the sheet does not show LocalTalk as present, contact your dealer or Digital.
Lower1 Tray Jam- Open Lower1 Tray	Paper has jammed feeding from the first lower tray (500-sheet Paper Deck and Cassette). The message alternates with: Open Front Cover Remove Jam Sheet ACTION: Remove the first lower tray, open the front cover and pull out the jammed paper. Then replace the lower tray and close the front cover. See *"Lower 1 Tray Jam"* (page 6-28).
Lower 1 Empty	The first lower tray (500-sheet Paper Deck and Cassette) is empty. ACTION: Reload the correct size paper.
Lower 1 Failure Service Required	The first lower tray (500-sheet Paper Deck and Cassette) has failed. Printing from this tray cannot continue. ACTION: Power off the printer and check the lower tray connection. If the failure continues, contact your dealer or Digital.
Lower 1 Out	The paper cassette has been removed (or is not pushed in all the way) from the first lower tray (500-sheet Paper Deck and Cassette). ACTION: Insert the paper cassette into the first lower tray.
Lower 1 Tray	Paper needs to be loaded in the first lower tray (500-sheet Paper Deck and Cassette). ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Lower 1-Main	Paper needs to be loaded in the first lower tray (500-sheet Paper Deck and Cassette) and/or the main tray. ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
Lower 1-Lower 2	Paper needs to be loaded in either lower tray (500-sheet Paper Deck and Cassette). ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
Lower2 Tray Jam-Open Lower2 Tray	Paper has jammed feeding from the second lower tray (500-sheet Paper Deck and Cassette). The message alternates with: Open Front Cover Remove Jam Sheet ACTION: Remove the second lower tray, open the front cover and pull out the jammed paper. Then replace the lower tray and close the front cover. See *"Lower 2 Tray Jam"* (page 6-28).
Lower 2 Empty	The second lower tray (500-sheet Paper Deck and Cassette) is empty. ACTION: Reload the correct size paper.
Lower 2 Failure Service Required	The second lower tray (500-sheet Paper Deck and Cassette) has failed. Printing from this tray cannot continue. ACTION: Power off the printer and check the Lower Tray connection. If the failure continues, contact your dealer or Digital.
Lower 2 Out	The paper cassette has been removed (or is not pushed in all the way) from the second lower tray (500-sheet Paper Deck and Cassette). ACTION: Insert the paper cassette into the second lower tray.
Lower 2 Tray	Paper needs to be loaded in the second lower tray (500-sheet Paper Deck and Cassette). ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
Lower 2-Main	Paper needs to be loaded in the second lower tray (500-sheet Paper Deck and Cassette) and/or the main tray. ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Lwr1-Lwr2-Main`	Paper needs to be loaded in both lower trays or the main tray. ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
`Mailbox Failure`	The Mailbox/Collator has failed. Printing to the Mailbox/Collator cannot continue. You can, however, send output to the standard output tray. ACTION: Remove the Mailbox/Collator following the instructions in *Appendix C: Installing and Removing Printer Options*. If the problem is not resolved, contact your dealer or Digital.
`Mailbox Jam-` `Open Mailbx Door`	Paper has jammed feeding to the Mailbox/Collator. The message alternates with: `Clear Paper Path` ACTION: Open the Mailbox/Collator's rear cover and pull out the jammed paper. Then close the Mailbox/Collator's rear cover. See *"Mailbox/Collator Jam"* (page 6-30).
`Main-Front Tray`	Paper needs to be loaded into the Main or Front Trays. ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
`Main Tray`	Paper needs to be loaded into the main tray. ACTION: The message on the bottom line of the Control Panel display advises what size paper to load.
`Main Tray Empty`	The main tray is empty. ACTION: Reload the correct size paper.
`Main Tray Fail` `Service Required`	The main tray has failed. Printing cannot continue from this tray. ACTION: Contact your dealer or Digital.
`Main Tray Jam-` `Open Main Tray`	Paper has jammed feeding from the main tray. The message alternates with: `Open Front Cover` `Remove Jam Sheet` ACTION: Remove the main tray, open the front cover and pull out the jammed paper. Then replace the main tray and close the front cover. See *"Main Tray Jam"* (page 6-27).
`Main Tray Out`	The main tray has been removed (or is not pushed in all the way) from the printer. ACTION: Insert the main tray into the printer.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Manual	Your application specifies "Manual Feed" as the paper source. Feed paper from the front tray. ACTION: The message on the bottom line of the Control Panel display advises what size paper to insert. You may use the paper size requested or any size the feeder will accept.
Memory Check Please Wait...	**Memory Check** was invoked from the Test Menu. The printer reboots upon completion. ACTION: None.
Memory Failure Service Required	The printer controller memory has failed; printing cannot resume. ACTION: • Perform a **Memory Check** to see if you can locate the problem. • Try powering OFF the printer then ON again. If the problem persists, contact your dealer or Digital.
Motor Failure Service Required	The printer motor has failed. Printing cannot continue. ACTION: Cycle the printer's power. If the problem persists, contact your dealer or Digital.
New Password >> XXXX	A new password is being enabled for a bin or the collator. An existing valid password has been entered and a new password is expected to be entered (where the XXXX is displayed. ACTION: Enter a new 4-digit password using the numeric keypad. Be sure to memorize this new password, as it will be needed to open the bin or mailbox.
NV Memory Fail Service Required	Nonvolatile memory on the printer controller has failed; printing cannot resume. ACTION: Contact your dealer or Digital.
Offline _/_ Press a key...	The printer is offline, not in menu mode, and without any fault conditions. Offline does not mean the printer is disconnected from the computer. It means page formatting and printing are halted. ACTION: To put the printer online, press **Online** ⇤. ACTION: To select menus, press **Menu** ▤. ACTION: To reset the printer, press **Reset** ↻.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Offset Jam-` `Open Rear Cover`	Paper has jammed feeding to the OCT. The message alternates with: `Open Offset Door` `Clear Paper Path` ACTION: See *"OCT Jam"* (page 6-29).
`Offset Tray Fail` `Service Required`	The Offset Catch Tray (OCT) has failed. Printing to the OCT cannot continue. You can however, direct output to the standard output tray. ACTION: Remove and reinstall the OCT as per the instructions in *Appendix C: Installing and Removing Printer Options*. If the problem persists, contact your dealer or Digital.
`Online` ___	The printer is online and either processing data or ready to accept print jobs. ACTION: None.
`Open Bin` *N*	The bin numbered *N* is unlocked and ready to be pulled out. ACTION: Pull out the bin.
`Open Bins`	Two or more bins are unlocked and ready to be pulled out. ACTION: Pull out the bins.
`Open Front Cover` `Remove Jam Sheet`	A paper jam has occurred. The message alternates with a message that specifies the location of the jam. ACTION: See Table 6.4 on page 6-27.
`Open Offset Door` `Clear Paper Path`	A paper jam has occurred. The message alternates with the message: `Offset Jam-` `Open Rear Cover` ACTION: See *"OCT Jam"* (page 6-29).

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Out of Memory`	Current PCL job cannot print because it exceeds available memory. • Even though **Auto Continue** may be *On*, you will see the message below for ten seconds: `Press *` • The printer waits ten seconds, then resumes (in effect, pressing **Enter** * for you). The page is ejected from the printer. Depending on the cause of the problem, your print job may continue or be ended. ACTION: • Reduce resolution to 600 x 600 dpi. • Install additional memory. • Contact your dealer or Digital.
`Page Too Complex`	In PCL or PostScript, the printing on a page is broken into horizontal bands. When the **Page Protection** option is set to *Off*, as a page is processed, each band has a limited time to be composed and imprinted on the page. `Page Too Complex` means the current page cannot print because there is not enough time to compose it. ACTION: Press **Enter** *. The page will be ejected and the print job will continue. The page that was too complex may be printed on more than one sheet of paper. To achieve correct printing, set the **Page Protection option** to the appropriate page size (or to *On* for PostScript) and send the print job again. Even though **Auto Continue** may be *On*, you will see the message below for ten seconds: `Press *` The printer waits ten seconds, then resumes (in effect, pressing **Enter** * for you).
`Paper Jam-` `Open Front Cover`	Paper has jammed at the EP (print) cartridge. The message alternates with: `Remove PrintCart` `Clear Paper Path` ACTION: See *"Print Cartridge Jam"* (page 6-31).

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Paper Jam-` `Open Rear Cover`	Paper has jammed in the rear of the printer. The message alternates with: `Clear Paper Path` or (if a Duplex Module jam): `Remove DuplxUnit` `Clear Paper Path` ACTION: See *"Paper Exit Jam"* (page 6-31) or *"Duplex Module Jam"* (page 6-30).
`Paper Size Jam-` `Open Rear Cover`	Paper has jammed due to being the incorrect size. The message alternates with: `Clear Paper Path` ACTION: See *"Paper Mismatch Jam"* (page 6-31).
`PCL Font List` `Printing...`	The PCL Font List is printing. ACTION: Remove the PCL Font List from the output tray when it has finished printing.
`*Pg Protect Off*`	The printer has turned Page Protection *Off* because there is insufficient memory to process the job with page protection. ACTION: Add printer memory if you want to process future complex jobs with Page Protection.
`Power Saver` `On`	The printer has set itself to lower power mode (Power Saver is on). As soon as it receives the next print job, the printer leaves power saver mode. ACTION: None.
`Press *`	The printer has a PCL error. ACTION: Press **Enter** `*`. This message functions with the System Menu option **Auto Continue**. When **Auto Continue** is set to *On*, this message is cleared automatically after ten seconds, and normal printing operation resumes.
`Press a key...`	The printer has just been taken offline. ACTION: No more processing can take place until you press one of the following keys: Menu, Reset, Online, or LastPage.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Press ↑ to Init.` `Press ↓ to Abort`	Either the hard disk's partition block cannot be understood or it has a bad high level format. This message flashes alternately with either: `Unknown Disk` or `Disk Format Bad` ACTION: Press **Up** ^ to format the disk or press **Down** ˇ to abort.
`*Prntng Simplex*`	The printer does not have enough memory to print the job as duplex, and will print it as simplex. ACTION: None. The message clears when the next job starts.
`Processing...`	The printer is processing data from a computer for printing. ACTION: None.
`PS Font List` `Printing...`	The list of PostScript fonts is printing. ACTION: Remove the PostScript Font List from the output tray when it has finished printing.
`Ready`	The printer is online and waiting for data to print. ACTION: None.
`Remove DuplxUnit` `Clear Paper Path`	A paper jam has occurred at the Duplex Module. The message alternates with the message: `Paper Jam-` `Open Rear Cover` ACTION: See *"Duplex Module Jam"* (page 6-30).
`Remove EnvFeeder` `Open Front Cover`	An Envelope Feeder jam has occurred. The message alternates with the messages: `EnvelFeeder Jam-` `Remove All Envel` and: `Remove Jam Envel` ACTION: See *"Envelope Feeder Jam"* (page 6-29).

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Remove Jam Envel`	An Envelope Feeder jam has occurred. The message alternates with the messages: `EnvelFeeder Jam-` `Remove All Envel` and: `Remove EnvFeeder` `Open Front Cover` ACTION: See *"Envelope Feeder Jam"* (page 6-29).
`Remove Output from Offset Tray`	The Offset Catch Tray (OCT) is full. Printing cannot continue to the OCT. ACTION: Remove the output from the OCT.
`Remove Output from Mailbox N`	Mailbox bin *N* is full. Printing cannot continue to bin *N*. ACTION: Remove the output from bin *N*. Press the unlock bin button, then enter the password, if requested.
`Remove Output from Std. Tray`	The standard output tray is full. Printing cannot continue. ACTION: Remove the output from the standard output tray.
`Remove PrintCart Clear Paper Path`	A paper jam has occurred. The message alternates with the message: `Paper Jam-` `Open Front Cover` ACTION: See *"Print Cartridge Jam"* (page 6-31).
`Replace Fuser Cartridge`	The Fuser Cartridge has reached End of Life. ACTION: Order a new Fuser Cartridge (see *Appendix A: Ordering Printer Options*) and replace as per the instructions in *Appendix B: Replacing Consumables*.
`Replace Print Cartridge`	The EP cartridge, which contains toner and drum, has expired. Printing cannot resume. ACTION: Insert new EP cartridge.
`*Res. Change*`	The printer is printing the job at a lower resolution than requested because there is not enough memory available. ACTION: Add printer memory.
`*Res& Smplx Chg*`	The printer has changed the job resolution, and changed a duplex job to simplex, because there is not enough memory to process the job at the higher resolution and duplex.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
Reset Ethernet Please Wait...	**Reset Ethernet** has been invoked from the Reset Menu. Returns the Digital Ethernet Network Interface Card to its power-on state and clears any print job being received, and previously downloaded, temporary fonts, and macros from memory. ACTION: Wait for the procedure to finish before taking any further action.
Reset LocalTalk Please Wait...	**Reset LocalTalk** has been invoked from the Reset Menu. Returns the Digital LocalTalk Network Interface Card to its power-on state and clears any print job being received, and previously downloaded temporary fonts, and macros from memory. ACTION: Wait for the procedure to finish before taking any further action.
Reset Menus Please Wait...	**Reset Menus** has been invoked from the Reset Menu. Returns all menu settings except **Language**, **Defaults**, **PowerSaver**, and **Password**(s) to their factory setting and clears any print job being received, and previously downloaded temporary fonts, and macros from memory. ACTION: Wait for the procedure to finish before taking any further action.
Reset Printer Please Wait...	**Reset Printer** or **Reset All** has been invoked from the Reset Menu. The printer clears any print job being received, and previously downloaded temporary fonts and macros from memory, then goes online. ACTION: None.
ResetToSave Or *	A setting will not take effect until a Reset is performed. ACTION: Perform a Reset or press **Enter** * to continue without the setting taking effect.
Temp Font/Macro	The printer was busy processing PCL data from a host system but the job was not completed since temporary fonts and macros were not deleted. The last page timeout has expired. This message appears until: • Another print job is received. • The **Port Timeout** expires and **Auto Job End** is *On*. ACTION: None.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Test Print` `Printing...`	A Test Print is being printed (for use by service technicians). The message clears once the printing is completed. ACTION: None.
`Toner Low`	Toner is getting low in the EP (print) cartridge, but printing will continue without interruption. ACTION: Replace the EP cartridge as soon as possible.
`Tray Jam-` `Open All Trays`	Paper has misfed at printer startup. The message alternates with: `Open Front Cover` `Remove Jam Sheet` ACTION: See *"Misfeed Jam at Startup"* (page 6-32).
`Turn Power Off` `Then On`	A fatal disk error has occurred. ACTION: Power OFF the printer, then ON.
`Unknown Disk`	The hard disk partition block cannot be understood. This is probably because a new disk has been installed. This message flashes alternately with the two-line message: `Press ↑ to Init.` `Press ↓ to Abort` ACTION: Press **Up** ^ to format the disk or press **Down** v to abort.
`Waiting...`	The printer was busy processing data from a host but the print job was not completed. This message appears until: • Another print job is received. • The **Port Timeout** expires and **Auto Job End** is *On*. • The last page timeout expires. • The PostScript "waittimeout" expires. ACTION: None.

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Table 6.2 Control Panel messages *(continued)*

Message	Description/Corrective Action
`Warming Up` `Please Wait...`	The Fuser has not warmed up yet. Message disappears when the printer is ready. The message displays at power-on and may display after the cover has been opened for some time or when the printer is exiting Power Saver mode. ACTION: None.
`Warning: Disk` `Data To Be Lost`	The *Format The Disk* option has been selected. ACTION: Press **Up** ^ to format the disk or press **Down** v to abort.
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Table 6.3 Diagnostic LED flash sequences

Flash Sequence	Description/Corrective Action
1 flash — 1 second — 1 flash…etc.	System controller CPU fault. ACTION: Contact your dealer or Digital.
2 flashes — 1 second — 2 flashes…etc.	Base RAM fault. ACTION: Contact your dealer or Digital.
3 flashes — 1 second — 3 flashes…etc.	ROM fault. ACTION: Remove the PostScript SIMM, if installed, and test the printer again. If the problem is resolved, replace the PostScript SIMM. If the problem is not resolved, contact your dealer or Digital.
4 flashes — 1 second — 4 flashes…etc.	System controller to print engine fault. ACTION: Make sure the controller board is firmly seated. If the problem is not resolved, contact your dealer or Digital.
5 flashes — 1 second — 5 flashes…etc.	Resolution enhancement self-test fault. ACTION: Contact your dealer or Digital.
6 flashes — 1 second — 6 flashes…etc.	Communications ports internal loopback test fault. ACTION: Contact your dealer or Digital.
7 flashes — 1 second — 7 flashes…etc.	Slot SIM2 fault. ACTION: Perform the corrective actions listed under 0100 in Table 6.2 on page 6-6.
8 flashes — 1 second — 8 flashes…etc.	Slot SIM3 fault. ACTION: Perform the corrective actions listed under 0101 in Table 6.2 on page 6-6.

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Paper Jams

Your printer has been designed to provide reliable, trouble-free operation. Nonetheless, you may experience an occasional paper jam.

When the printer detects a misfeed or a paper jam, the printing process is halted, and a Control Panel message is displayed.

After the paper jam has been cleared, the printer will resume operation to complete the print job. Set the **Jam Recovery** option to *On* to guarantee that pages in the print engine when the jam occurs will be reprinted.

What Causes a Paper Jam?

Paper jams occur most often when:

- The throughput paper stock does not meet specification. See *Chapter 2: Paper Handling*.
- The paper stock is in poor condition.
- The paper stock has been improperly loaded into the paper trays.
- The printer needs cleaning.
- Printer parts are worn and need to be replaced.

Clearing Paper Jams

Table 6.4 on page 6-27 lists the types of paper jams that may occur. If you see a Control Panel message that indicates a paper jam, find the message in the left-hand column and perform the accompanying steps to clear the paper jam.



Caution

Be careful not to touch any of the components inside the printer when removing jammed paper. They may be very hot.

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Table 6.4 Paper jam messages and corrective actions

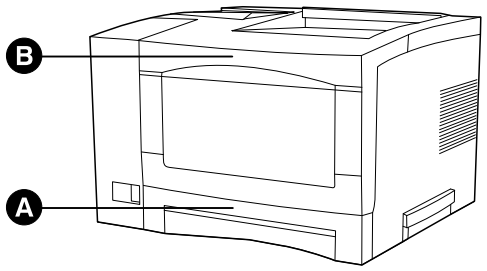
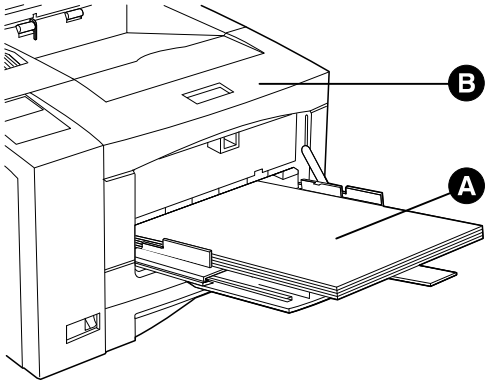
Control Panel Message	Type of Paper Jam/Remedial Action
`Main Tray Jam-` `Open Main Tray` alternating with `Open Front Cover` `Remove Jam Sheet`	**Main Tray Jam** 1. Remove the main tray (A). 2. Remove the Envelope Feeder if installed. 3. Open the front cover (B). 4. Remove the jammed sheet. 5. Replace the main tray. 6. Close the front cover. 7. Replace the Envelope Feeder if necessary. 
`Front Tray Jam-` `Remove All Paper` alternating with `Open Front Cover` `Remove Jam Sheet`	**Front Tray Jam** 1. Remove all paper from the front tray (A). 2. Remove the Envelope Feeder if installed. 3. Open the front cover (B). 4. Remove the jammed sheet of paper. 5. Close the front cover. 6. Reload the front tray. 7. Replace the Envelope Feeder if necessary. 

Table 6.4 Page 1 of 6

Table 6.4 Paper jam messages and corrective actions *(continued)*

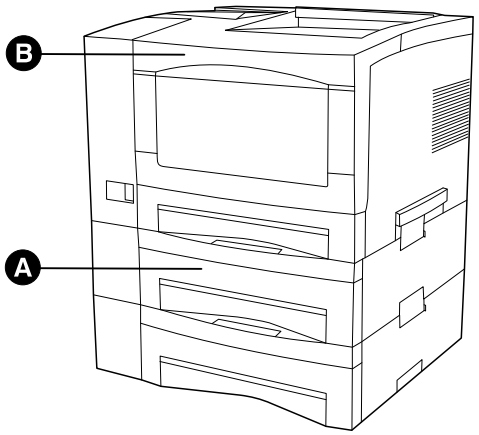
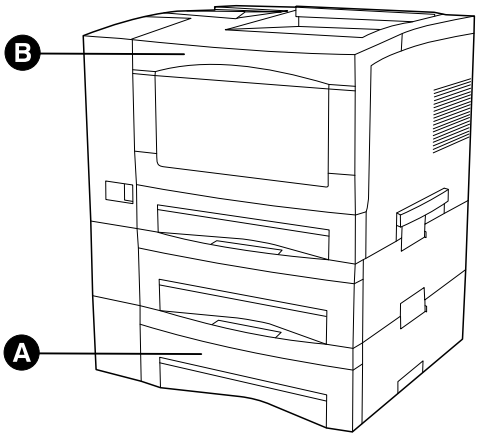
Control Panel Message	Type of Paper Jam/Remedial Action
`Lower1 Tray Jam-Open Lower1 Tray` alternating with `Open Front Cover Remove Jam Sheet`	**Lower 1 Tray Jam** 1. Remove the lower 1 tray (A). 2. Remove the Envelope Feeder if installed. 3. Open the front cover (B). 4. Remove the jammed sheet of paper. 5. Replace the lower 1 tray. 6. Close the front cover. 7. Replace the Envelope Feeder if necessary. 
`Lower2 Tray Jam-Open Lower2 Tray` alternating with `Open Front Cover Remove Jam Sheet`	**Lower 2 Tray Jam** 1. Remove the lower 2 tray (A). 2. Remove the Envelope Feeder if installed. 3. Open the front cover (B). 4. Remove the jammed sheet of paper. 5. Replace the lower 2 tray. 6. Close the front cover. 7. Replace the Envelope Feeder if necessary. 

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Table 6.4 Paper jam messages and corrective actions *(continued)*

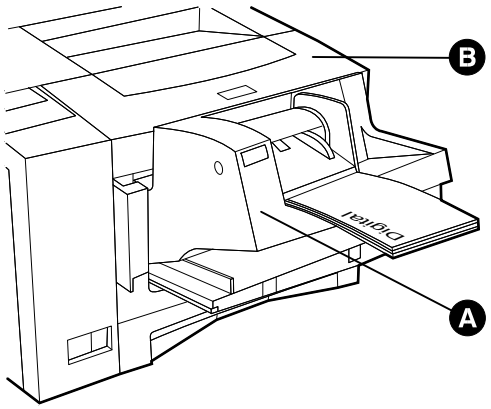
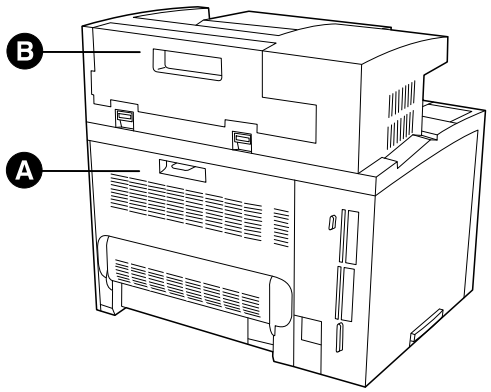
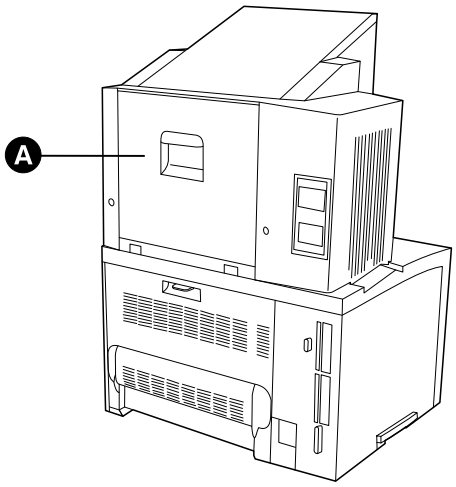
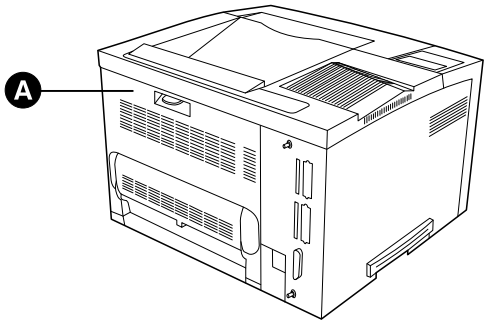
Control Panel Message	Type of Paper Jam/Remedial Action
`EnvelFeeder Jam-Remove All Envel` alternating with `Remove EnvFeeder Open Front Cover` and `Remove Jam Envel`	**Envelope Feeder Jam** 1. Remove all envelopes from the Envelope Feeder (A). 2. Remove the Envelope Feeder. 3. Open the front cover (B). 4. Remove the jammed envelope. 5. Close the front cover. 6. Replace the Envelope Feeder. 7. Reload the Envelope Feeder. 
`Offset Jam-Open Rear Cover` alternating with `Open Offset Door Clear Paper Path`	**OCT Jam** 1. Open the rear cover (A). 2. Open the OCT's rear cover (B). 3. Remove the jammed paper. 4. Close the OCT's rear cover. 5. Close the printer's rear cover. 

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Table 6.4 Paper jam messages and corrective actions *(continued)*

Control Panel Message	Type of Paper Jam/Remedial Action
`Mailbox Jam-` `Open Mailbx Door` alternating with `Clear Paper Path`	**Mailbox/Collator Jam** 1. Open the rear cover of the Mailbox/Collator (A). 2. Remove the jammed paper. 3. Close the rear cover of the Mailbox/Collator. 
`Paper Jam-` `Open Rear Cover` alternating with `Remove DuplxUnit` `Clear Paper Path`	**Duplex Module Jam** 1. Open the rear cover (A). 2. Remove the Duplex Module. 3. Remove the jammed paper. 4. Replace the Duplex Module. 5. Close the rear cover. 

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Table 6.4 Paper jam messages and corrective actions *(continued)*

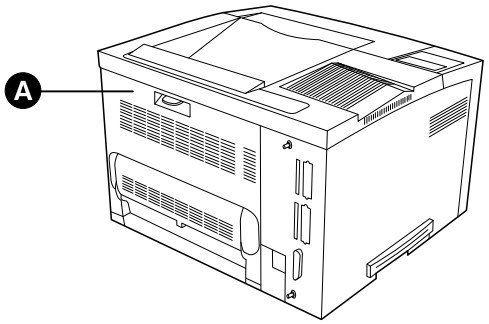
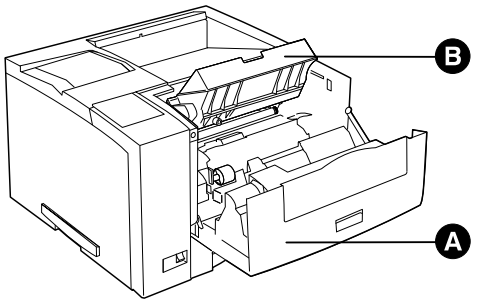
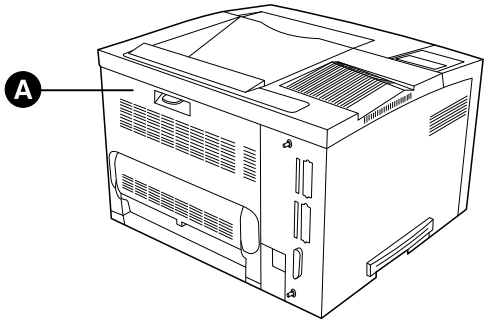
Control Panel Message	Type of Paper Jam/Remedial Action
`Paper Jam-` `Open Rear Cover` alternating with `Clear Paper Path`	**Paper Exit Jam** 1. Open the rear cover (A). 2. Remove the jammed paper. 3. If you do not see the jammed paper, remove the Duplex Module, remove the jammed paper, then replace the Duplex Module. 4. Close the rear cover. 
`Paper Jam-` `Open Front Cover` alternating with `Remove PrintCart` `Clear Paper Path`	**Print Cartridge Jam** 1. Remove the Envelope Feeder if installed. 2. Open the front cover (A). 3. Remove the EP cartridge (B). 4. Remove the jammed paper. 5. Reinsert the EP cartridge. 6. Close the front cover. 7. Replace the Envelope Feeder if necessary. 
`Paper Size Jam-` `Open Rear Cover` alternating with `Clear Paper Path`	**Paper Mismatch Jam** 1. Change the loaded paper to the correct size. 2. Open the rear cover (A). 3. Remove the jammed paper. 4. Close the rear cover. 5. If the problem paper was in the front tray or the Envelope Feeder, check that the corresponding menus are set to the size loaded. 

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Table 6.4 Paper jam messages and corrective actions *(continued)*

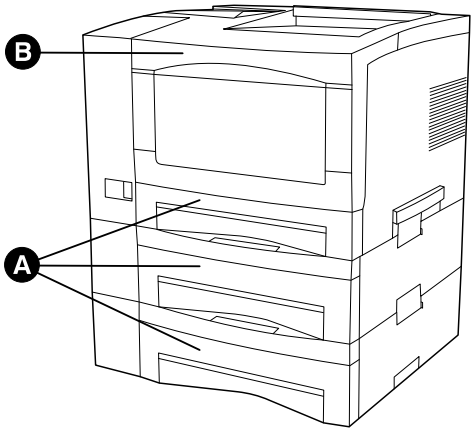
Control Panel Message	Type of Paper Jam/Remedial Action
`Tray Jam-` `Open All Trays` alternating with `Open Front Cover` `Remove Jam Sheet`	**Misfeed Jam at Startup** 1. Remove all trays (A). 2. Remove the Envelope Feeder if installed. 3. Open the front cover (B). 4. Remove the jammed paper. 5. Replace all trays. 6. Close the front cover. 7. Replace the Envelope Feeder if necessary. 

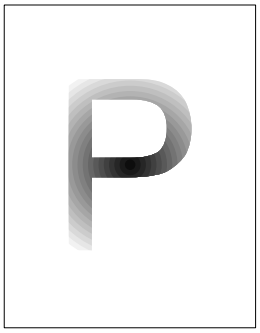
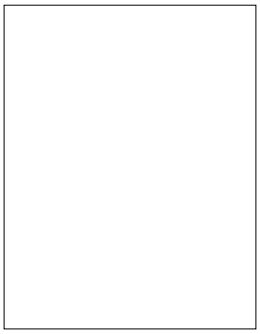
Table 6.4 Page 6 of 6

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Print Quality Problems

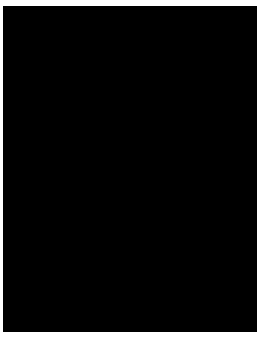
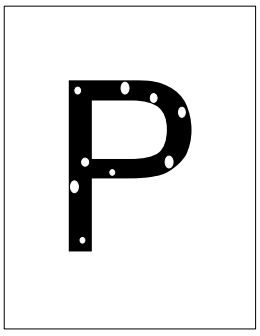
Table 6.5 lists common print quality problems, the possible cause, and recommended actions.

Table 6.5 Print quality problems

Problem	Possible Cause(s)	Corrective Action(s)
Light/faint prints Overall image is lighter than normal. 	Toner Saver mode.	Turn off Toner Saver. Shake EP cartridge several times.
	Toner level low/empty.	Remove EP cartridge, shake it several times, then reinstall.
	Damp paper stock.	Replace paper stock.
Blank Prints Entire printed page is blank with no visible print. 	If just installed, the EP Cartridge insert (tape) may still be in place.	Remove the tape insert.
	Multiple sheets are being fed from the paper tray at the same time.	Remove paper from paper tray and fan it. Ensure that paper is correctly loaded in tray with edges under metal corners.
	No printable data received from computer.	Print a Test Print. If the Test Print is normal, check the following: • Interface cable between computer and printer • Printer set up and application software If the Test Print is blank, contact your dealer or Digital.
	Defective EP cartridge or low on toner.	Replace EP cartridge.

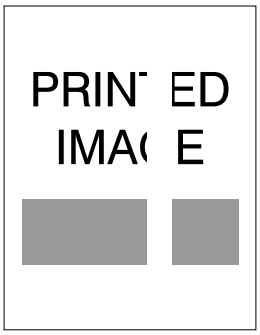
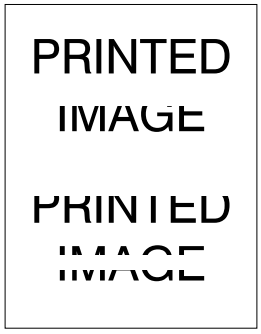
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Table 6.5 Print quality problems *(continued)*

Problem	Possible Cause(s)	Corrective Action(s)
Black prints The page is entirely black. 	Defective EP cartridge, or the EP cartridge is at its end of life.	Replace EP cartridge.
	Printer power supply has failed.	Contact your dealer or Digital.
Spot deletions Areas of the print are extremely light or missing. 	Damp paper stock.	Replace paper stock.
	Defective EP cartridge, or the EP cartridge is at its end of life.	Replace EP cartridge.

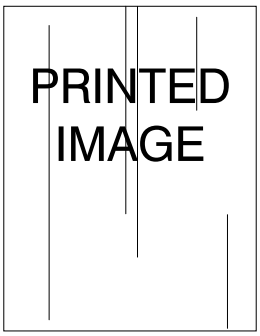
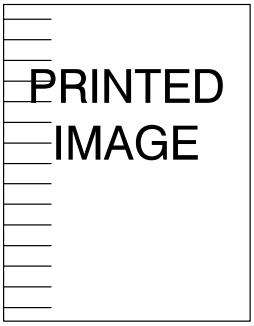
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Table 6.5 Print quality problems *(continued)*

Problem	Possible Cause(s)	Corrective Action(s)
Vertical line deletions Localized print deletions forming narrow lines running in the direction of paper movement. 	EP cartridge not installed correctly	Remove then reinstall the EP cartridge.
	Defective EP cartridge, or the EP cartridge is at its end of life	Replace EP cartridge.
Horizontal line deletions Localized print deletions appearing as bands running across the page perpendicular to the direction of paper movement. 	Defective paper stock, creases, folds, etc.	Replace paper stock.
	Page too complex	Turn Page Protection on.

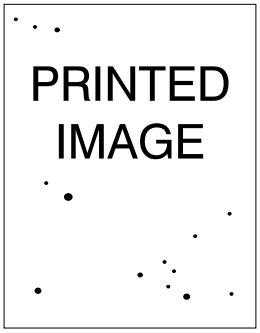
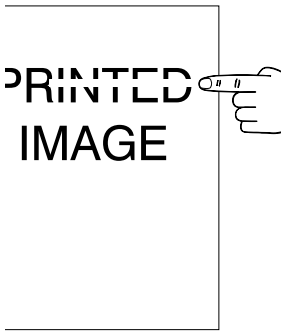
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Table 6.5 Print quality problems *(continued)*

Problem	Possible Cause(s)	Corrective Action(s)
Vertical dark streaks Black lines running across the print in the direction of paper movement. 	Defective EP cartridge, or the EP cartridge is at its end of life.	Replace EP cartridge.
	Defective fuser cartridge.	Replace the fuser cartridge. (See Appendix A for ordering information. See Appendix B for installation and removal instructions.)
Repetitive horizontal dark streaks Black lines running across the page perpendicular to the direction of paper movement. 	Contaminated paper path.	Print several blank sheets of paper to remove any toner accumulations.
	Defective EP cartridge, or the EP cartridge is at its end of life.	Replace EP cartridge.

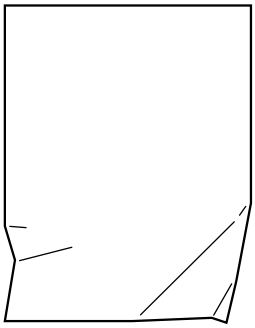
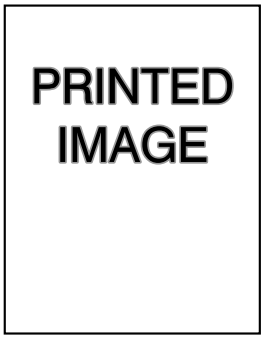
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Table 6.5 Print quality problems *(continued)*

Problem	Possible Cause(s)	Corrective Action(s)
Dark spots/marks 	Defective EP cartridge.	Replace EP cartridge.
Unfused or partially fused image The printed image is not fully fused to the paper and easily rubs off. 	Damp paper stock.	Replace paper stock.
	Heavy or unusual paper stock.	Use only approved paper/media. (See *Chapter 2: Paper Handling*).
	Defective Fuser Module.	Replace the fuser cartridge. (See Appendix A for ordering information. See Appendix B for installation and removal instructions.)

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Table 6.5 Print quality problems *(continued)*

Problem	Possible Cause(s)	Corrective Action(s)
Wrinkled prints Prints are wrinkled, creased, or torn. 	Poor paper condition.	Inspect/replace paper stock.
	Paper is damp.	Replace paper stock.
	Fuser cartridge is at its end of life	Replace the fuser cartridge. (See Appendix A for ordering information. See Appendix B for installation and removal instructions.)
Blurred prints Image is blurred at the edges. 	Poor paper condition.	Inspect/replace paper stock.
	Paper is damp.	Replace paper stock.

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Table 6.5 Print quality problems *(continued)*

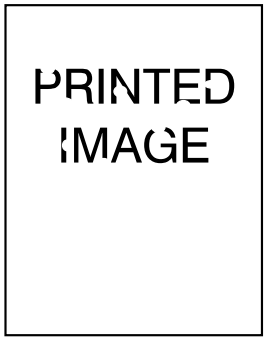
Problem	Possible Cause(s)	Corrective Action(s)
Random deletions Random light areas and deletions. 	Poor paper condition. Paper is damp.	Inspect/replace paper stock. Replace paper stock.

Table 6.5 Page 7 of 7

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Appendix A

Ordering Printer Options

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For high quality and reliability, use genuine Digital supplies and accessories. Contact your local authorized Digital reseller or Digital sales office for more information or to order any of the printer options and accessories listed in Table A.1. In North America, call 1-800-DIGITAL (1-800-344-482).

Table A.1 Printer options and accessories

Option	Part No.	Comments
Toner (EP) Cartridge	LN17X-AA	
Fuser Cartridge	LN17-AB	100K Maintenance Kit 110 V
	LN17-AC	100K Maintenance Kit 240 V
Paper Handling Options		
500-sheet Paper Deck (tray) and Cassette	LN17X-TA	See Table 2.1 in *Chapter 2: Paper Handling* for a complete list of supported paper sizes for each paper handling option.
500-sheet (feeder) Paper Cassette	LN17X-TB	
250-sheet Main Tray Cassette	LN17X-TC	
Duplexing Option	LN17X-DA	
500-sheet Output Offset Stacker	LN17X-TS	
Locking Mailbox (10-bin, 50 sheets per bin, 20 lb paper)	LN17X-TM	
Envelope Feeder (75 envelopes)	LN17X-TE	

Table A.1 Page 1 of 3

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Table A.1 Printer options and accessories *(continued)*

Option	Part No.	Comments
Memory Options		
4 MB SIMM	LNXXM-AA	SIMM requirements: • No parity • 70 nanosecond access time • 8 bits • One-sided
16 MB SIMM	LNXXM-AC	SIMM requirements: • No parity • 70 nanosecond access time • 32 bits • One-sided
32 MB SIMM	LNXXM-AD	SIMM requirements: • No parity • 70 nanosecond access time • 32 bits • Two-sided
PostScript Option		
LN17 Adobe PostScript Level 2 Language Interpreter SIMM	LN17X-PS	Includes 4 MB SIMM.
Hard Drive	LN17X-HD	420 MB hard drive
Digital Network Interface Cards (DNICs)		
DNIC-E'NET (Digital Network Interface Card for Ethernet) *with BNC and RJ-45 connectors*	LN17X-NW	The DNIC-E'NET supports the following protocols: • Novell NetWare • TCP/IP • EtherTalk • LAT • Microsoft Windows NT • SNMP Includes DS/P software.

Table A.1 Page 2 of 3

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Table A.1 Printer options and accessories *(continued)*

Option	Part No.	Comments
DNIC-L'TALK (Digital Network Interface Card for LocalTalk) *with a DIN-8 connector*	LN17X-AT	The DNIC-L'TALK supports the following protocol: • AppleTalk
PC and Macintosh cables		
AppleTalk Cable	BCC46-06	DIN 8-pin Male, 1.8 m (6 ft)
Parallel Cables	BC19M-06	25-pin Centronics Parallel, 1.8 m (6 ft)
	BC19M-10	25-pin Centronics Parallel, 3.0 m (10 ft)
User Documentation		
LN17/LN17ps Printers Base Documentation Kit	EK-LN17P-DK	Includes Setting Up Guide, User Guide, and Quick Reference Card (also available individually, as listed below).
LN17/LN17ps Printers Setting Up Guide	EK-LN17P-IN	Also available as part of Base Documentation Kit, listed above.
LN17/LN17ps Printers User Guide	EK-LN17P-UG	Also available as part of Base Documentation Kit, listed above.
LN17/LN17ps Printers Quick Reference Card	EK-LN17P-RC	Also available as part of Base Documentation Kit, listed above.
DNIC-L'TALK Configuration Guide	EK-LN17A-CG	Also available as part of the LocalTalk Kit, listed above.
DNIC-E'NET Configuration Guide	EK-LN17E-CG	Also available as part of Ethernet Kit, listed above.
DS/P User Guide	EK-LN17M-UG	

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Table A.2 DECprint Supervisor (DCPS) for OpenVMS Order Numbers

Option	Part No.	Comments
Software Media and Documentation		
DECprint Supervisor for OpenVMS Media and Documentation	QA-09N**-H*	
User Documentation		
DECprint Supervisor for OpenVMS Documentation Kit	QA-09N**-GZ	Also available as part of the media and documentation kit described above. The documentation kit includes the installation guide, user guide, and system manager guide.

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Appendix B

Replacing Consumables

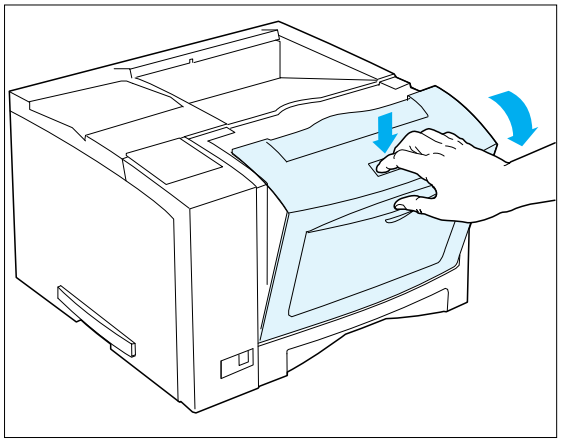
Replacing the EP Cartridge *B-2*
Replacing the Fuser Cartridge/BTR *B-5*

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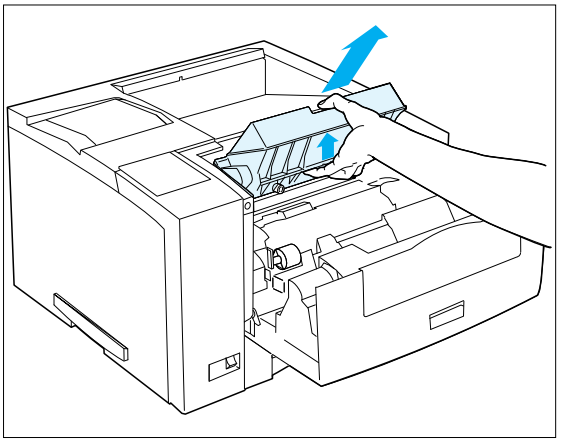
Replacing the EP Cartridge

Caution

- **Do not expose the EP (electronic printing) cartridge to direct sunlight or artificial light for more than 15 minutes. Overexposure will permanently damage the photosensitive imaging drum.**
- **Do not open the drum shutter or touch the green imaging drum.**
- **Complete the EP cartridge installation within 15 minutes of removing the cartridge from its package.**

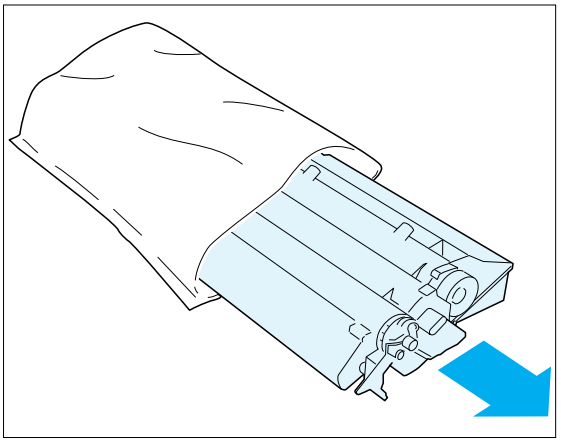


1 **Open the front cover by pressing the button on top of the cover.**

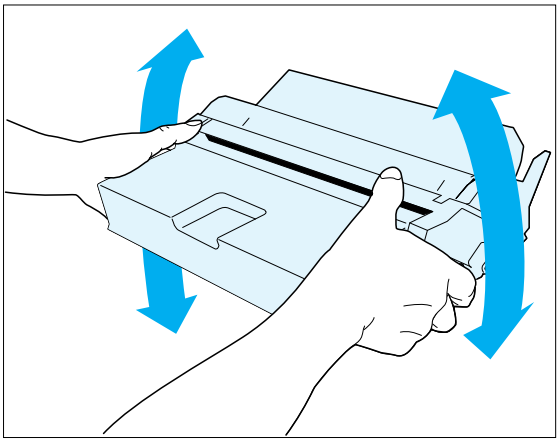


2 **Remove the old EP cartridge by lifting it towards the rear of the printer then pulling it up and out.**

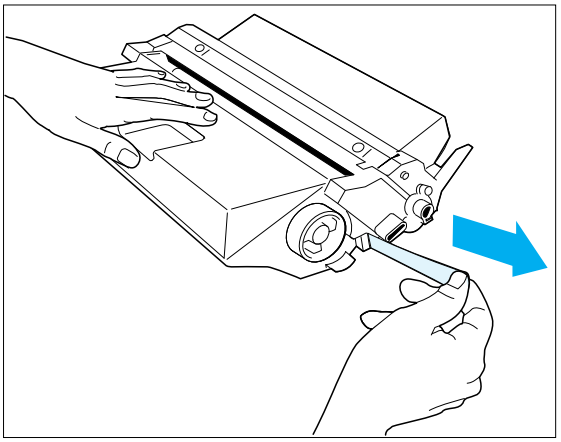
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3 **Remove the new EP cartridge from its wrapper.**

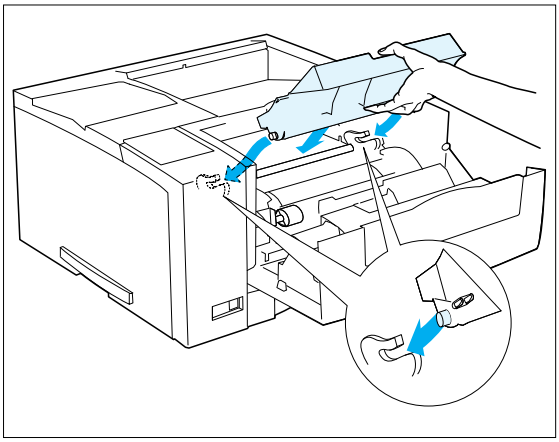


4 **Shake the EP cartridge several times to evenly distribute the toner.**



5 **Remove the tape strip.**

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6 **Insert the EP cartridge into the guide channels marked by the arrows inside the front cover. Push in until it clicks in place, then close the front cover.**

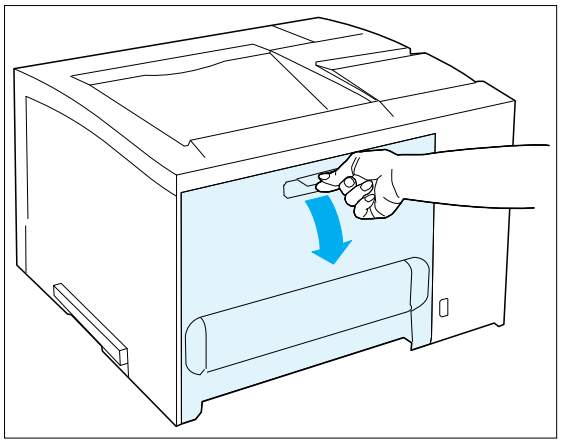
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Replacing the Fuser Cartridge/BTR

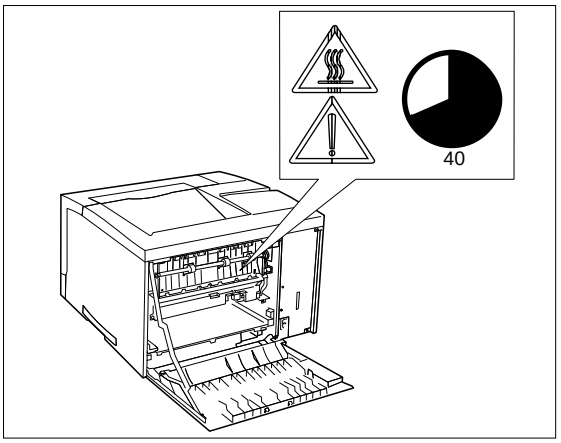
Caution

- **The fuser area is extremely hot. Turn the printer OFF and allow it to cool for 40 minutes before replacing an existing fuser cartridge.**
- **Replacing the BTR (Bias Transfer Roll) requires removing the EP cartridge. Do not expose the EP cartridge to direct sunlight or artificial light for more than 15 minutes. Overexposure will permanently damage the photosensitive imaging drum.**

1 **Power OFF the printer and disconnect the power cord and any interface cables.**



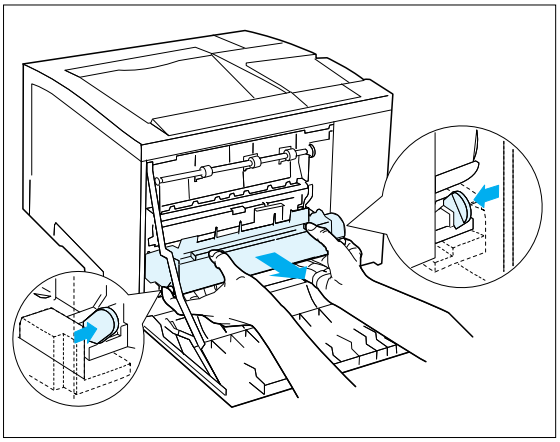
2 **Open the rear cover.**



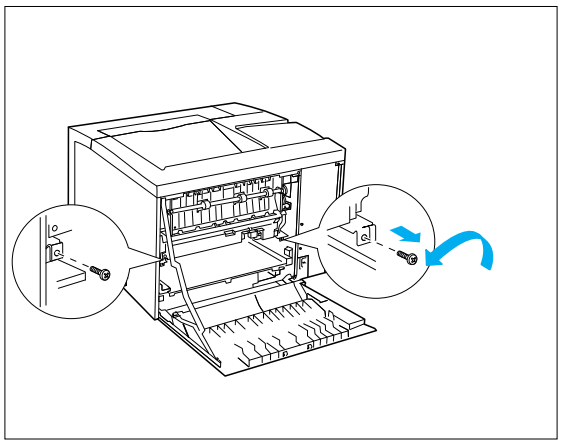
3 **Let the fuser area cool for 40 minutes.**

If the Duplex Module is installed, continue with Step 4 on page B-6. Otherwise, skip to Step 5 on page B-6.

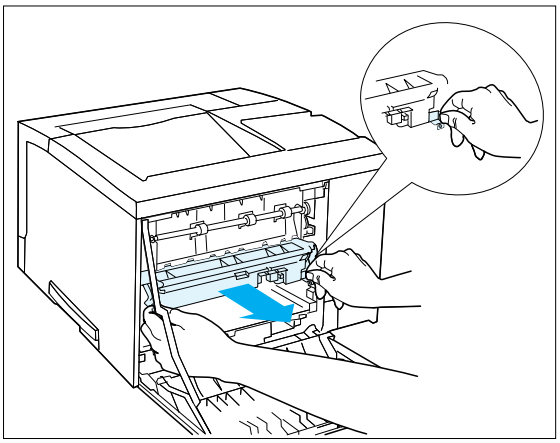
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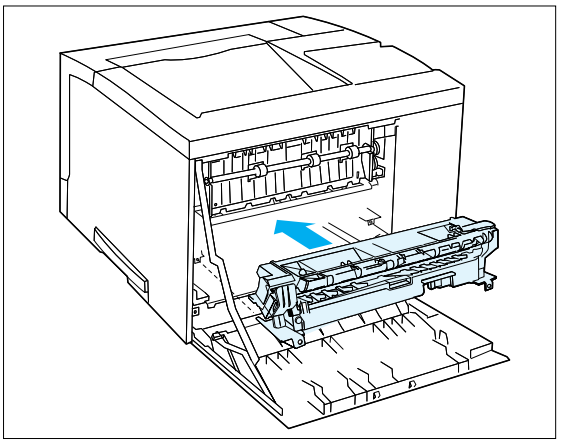
4 **Remove the Duplex Module by pushing the green lock buttons on either side of it.**



5 **Remove the mounting screws from the printer as shown above, and set them aside.**

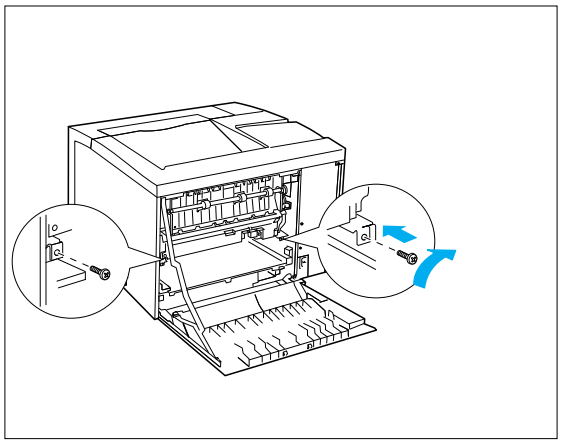


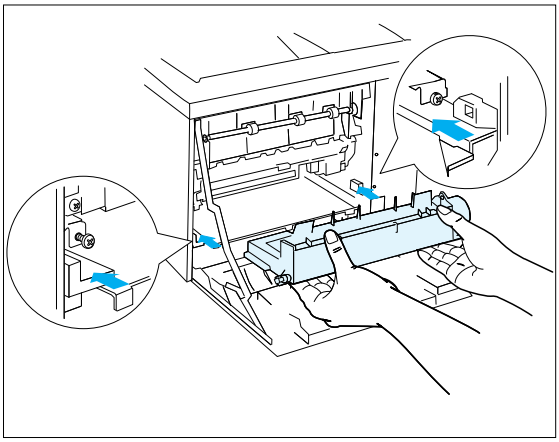
6 **Pull out the old fuser cartridge by the tabs on either side of the cartridge.**



7 **Slide the new fuser cartridge into the printer.**

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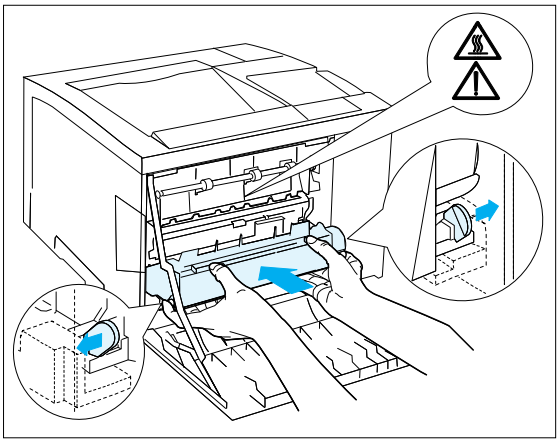


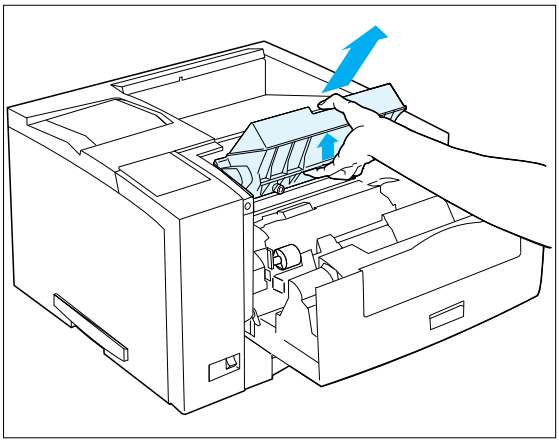


8 **Secure the fuser cartridge by replacing the mounting screws that were removed in Step 5 on page B-6.**

If you do not need to re-install the Duplex Module, close the rear cover and skip to Step 11.

9 **Insert the Duplex Module through the guide channels.**

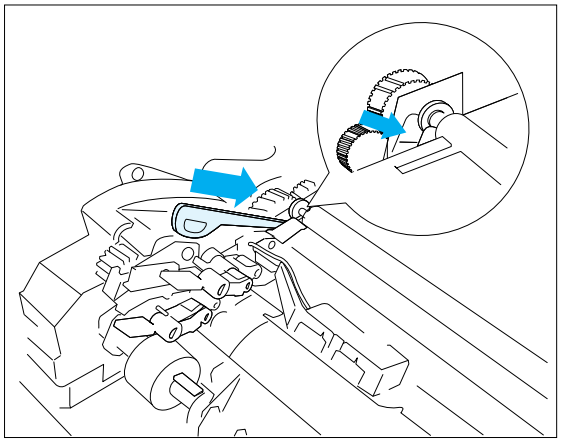




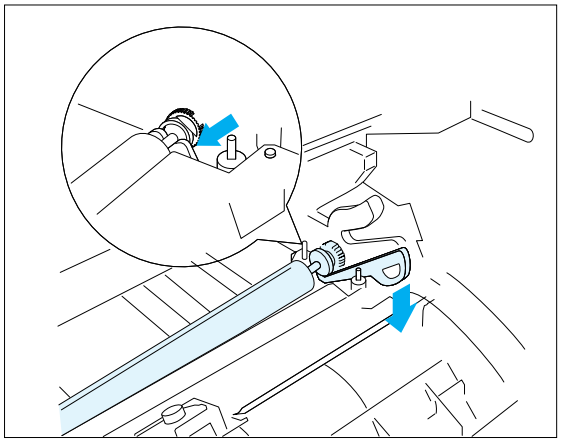
10 **Make sure the green side-locks at both ends click into position. Then close the rear cover.**

11 **Open the front cover and remove the EP cartridge by lifting it towards the rear of the printer then pulling it up and out.**

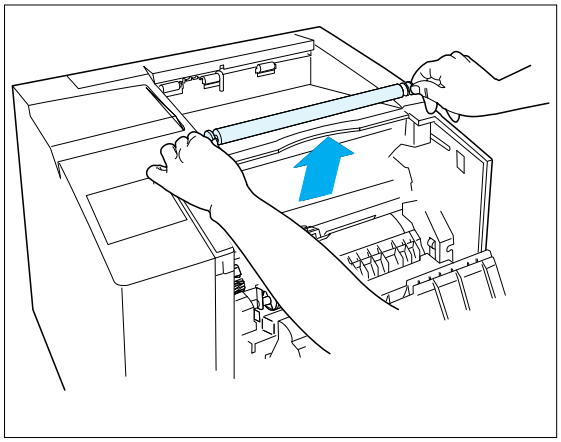
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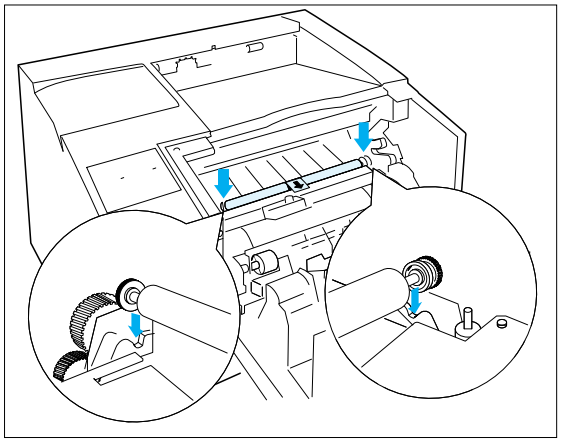
12 **Use the BTR removal tool to release the left side of the BTR.**



13 **Use the BTR removal tool to release the right side of the BTR.**

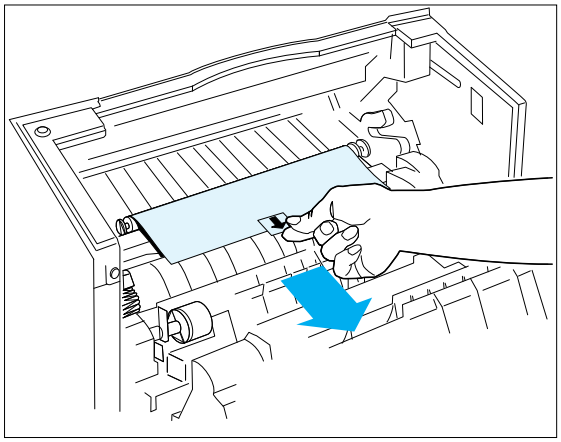


14 **Lift the BTR out of the printer.**

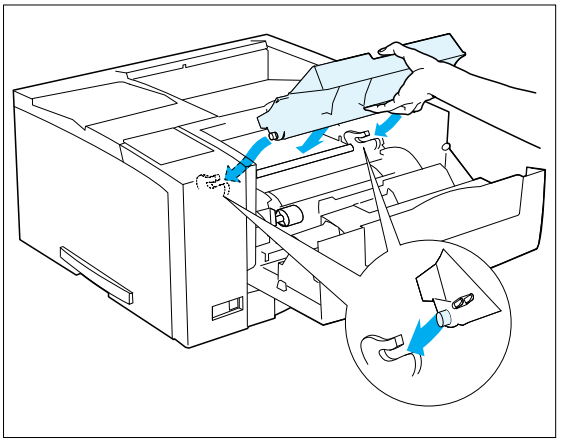


15 **Insert the new BTR, making sure it is seated properly.**

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16 **Pull the tab to remove the BTR's protective covering.**



17 **Re-insert the EP cartridge into the guide channels marked by the arrows inside the top cover. Push in until it clicks in place, then close the front cover.**

18 **Plug in the power cord. Press and hold Online ⇤ and Menu ▤ while powering ON the printer. This will reset the Fuser Life counter and release the warning message.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If the `Replace Fuser Cartridge` message still appears, Step 18.

If any other message is displayed, see Table 6.2 starting on page 6-6.

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Appendix C

Installing and Removing Printer Options

Precautions ***C-3***

Memory SIMMs ***C-4***

Installing a Memory SIMM *C-5*

Removing a Memory SIMM *C-8*

PostScript SIMM ***C-10***

Installing the PostScript SIMM *C-10*

Removing the PostScript SIMM *C-13*

Hard Drive ***C-16***

Installing the Hard Drive *C-16*

Removing the Hard Drive *C-19*

Duplex Module ***C-21***

Installing the Duplex Module *C-21*

Removing the Duplex Module *C-23*

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500-sheet Paper Deck and Cassette ***C-24***
Installing One 500-sheet Paper Deck and Cassette *C-24*
Installing Two 500-sheet Paper Decks and Cassettes *C-27*
Removing a 500-sheet Paper Deck and Cassette *C-31*
Offset Catch Tray (OCT) ***C-33***
Installing the OCT *C-33*
Removing the OCT *C-36*
Mailbox/Collator ***C-38***
Installing the Mailbox/Collator *C-38*
Removing the Mailbox/Collator *C-41*
Envelope Feeder ***C-43***
Installing the Envelope Feeder *C-43*
Removing the Envelope Feeder *C-46*
Digital Network Interface Card (DNIC) ***C-48***
Installing the DNIC *C-49*
Removing the DNIC *C-53*

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Precautions

The LN17 printer options are easy to install. Installing and testing any one option is likely to take 5 to 15 minutes.

Before installing or removing any printer option, take the precautionary steps outlined below.



Caution

POWER OFF THE PRINTER: The printer determines which options are installed through a self-test. The self-test is run when you power ON the printer. Therefore, for proper operation, you must power OFF the printer before installing/removing an option, then power it back ON after installing/removing an option.



Caution

DISCONNECT THE POWER CORD: Never remove the printer controller board while the printer is plugged in.

To avoid the possibility of electrical shock, always disconnect the power cord when installing or removing ANY internal or external printer option.



Caution

DISCHARGE STATIC ELECTRICITY: The controller board and internal printer options (SIMMs, network interface cards, and the hard drive) are sensitive to static electricity. Before installing or removing an internal option, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, again discharge any static electricity.

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Memory SIMMs

This section contains two sets of instructions:

- *"Installing a Memory SIMM"* (page C-5)
- *"Removing a Memory SIMM"* (page C-8)



Note

Memory SIMMs for the LN17 printer are available in the following sizes:

- *one-sided 4 MB and 16 MB*
- *two-sided 32 MB*

(See Appendix A: Ordering Printer Options *for ordering additional memory.)*

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Installing a Memory SIMM

Caution

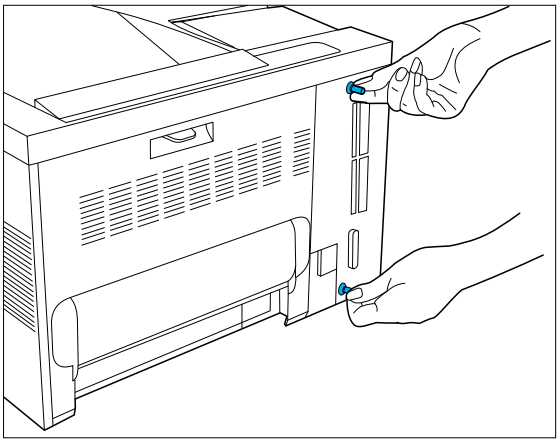
SIMMs and controller boards are sensitive to static electricity. Before installing a SIMM, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, again discharge any static electricity.

Never remove the printer controller board while the printer is plugged in.

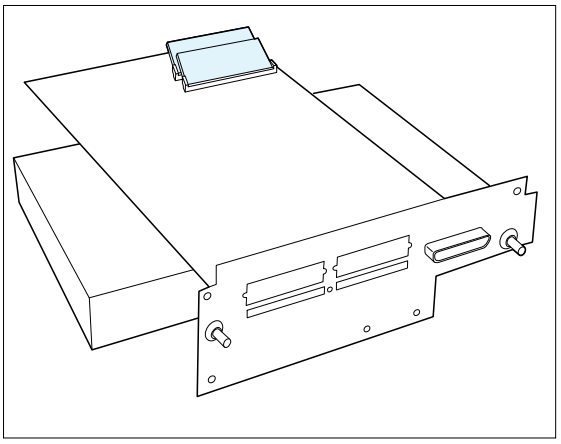
Note

1 MB of the printer's resident memory is unusable for each 32 MB SIMM that is installed. Therefore, when you install one 32 MB SIMM the total system memory is 33MB, not 34 MB. When two 32 MB SIMMs are installed, the total system memory is 64 MB, not 66 MB.

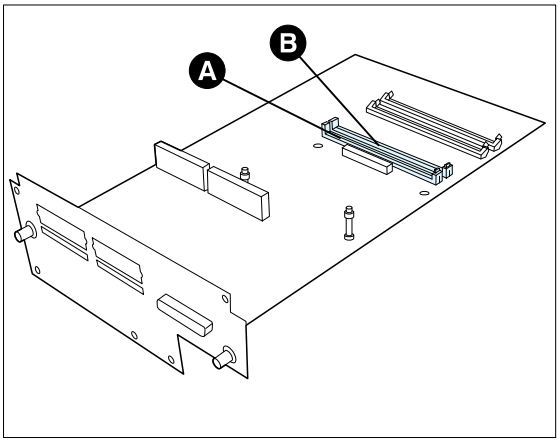
1 **Power OFF the printer and disconnect the power cord and any interface cables.**



2 **Loosen the thumb screws and pull out the controller board.**

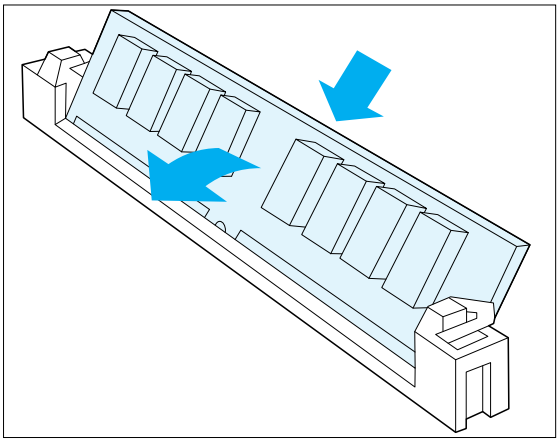


3 **Place the controller board on a ream of paper.**

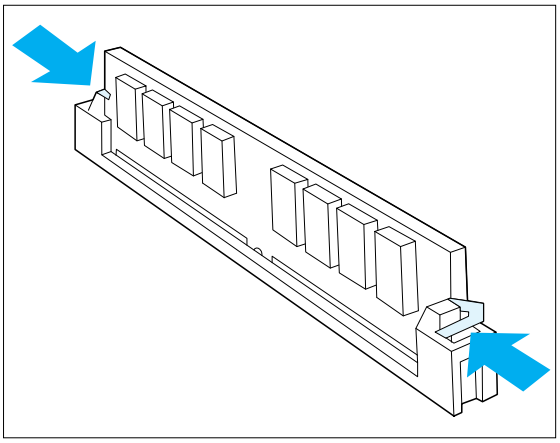


4 **Select an appropriate SIMM slot to use.**

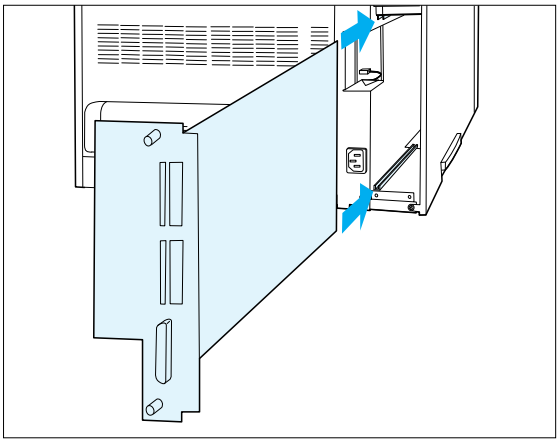
Slots SIM2 (A) and SIM3 (B) are interchangeable and are used for installing additional printer memory.



5 **Insert the new SIMM at an angle into the appropriate SIMM slot and rotate it up into position.**



6 **Make sure that the clips on either side snap closed to lock the SIMM in place.**



7 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

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8 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

9 **Print a Configuration Sheet to verify that the SIMM has been installed properly.**

A **Press Online ⇤ to take the printer offline.**

B **Press Menu ▤, then Down ⌄ or Up ⌃ until you see:**

```
Main Menu
Test Menu
```

C **Press Enter * and the message display changes to:**

```
Test Menu
Config. sheet
```

D **Press Enter * again to print a Configuration Sheet.**

E **After the Configuration Sheet prints, press Online ⇤ to put the printer back online.**



On the Configuration Sheet, the "Total system memory" value should match the amount of memory just installed plus the RAM resident on the printer.

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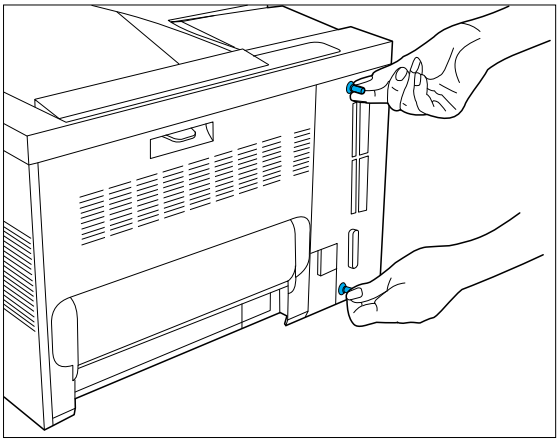
Removing a Memory SIMM

Caution

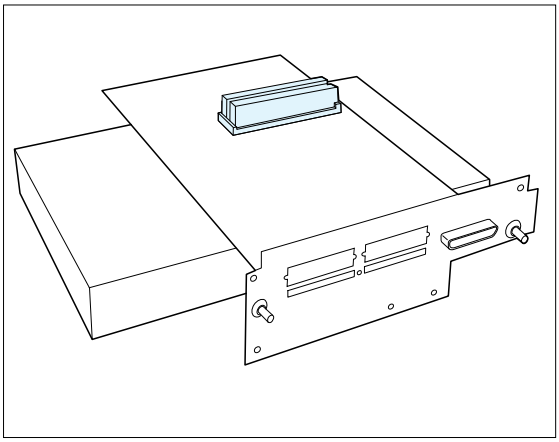
SIMMs and controller boards are sensitive to static electricity. Before removing a SIMM, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the removal, again discharge any static electricity.

Never remove the printer controller board while the printer is plugged in.

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

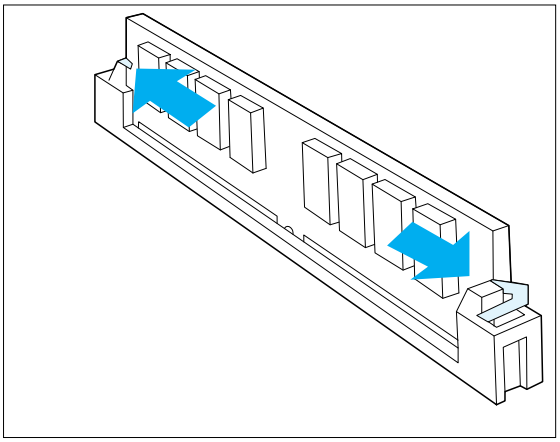


2 **Loosen the thumb screws and pull out the controller board.**

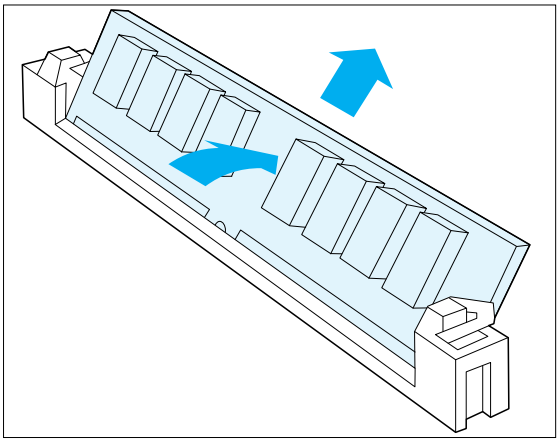


3 **Place the controller board on a ream of paper.**

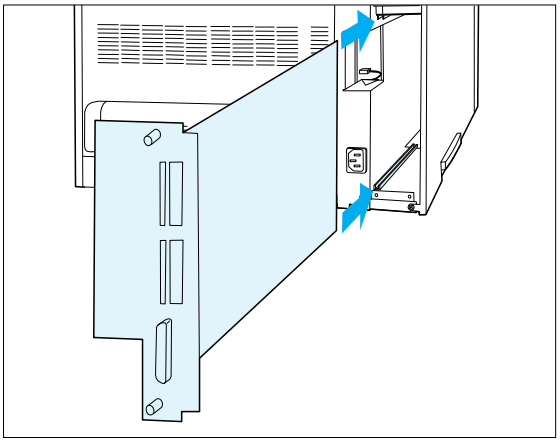
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4 **Carefully push out on the locking clips to release the SIMM.**



5 **Rotate the SIMM down out of position, then lift it out.**



6 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

7 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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PostScript SIMM

This section contains two sets of instructions:

- *"Installing the PostScript SIMM"* (below)
- *"Removing the PostScript SIMM"* (page C-13)

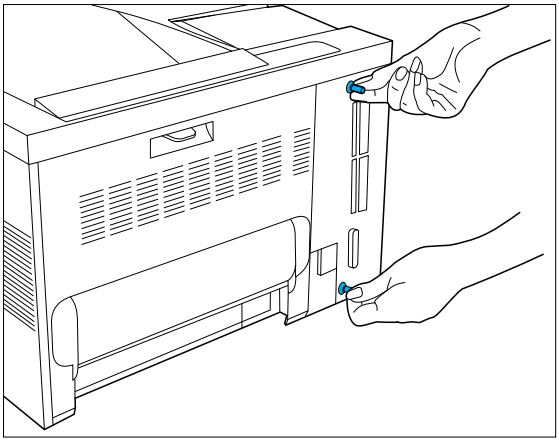
Installing the PostScript SIMM

Caution

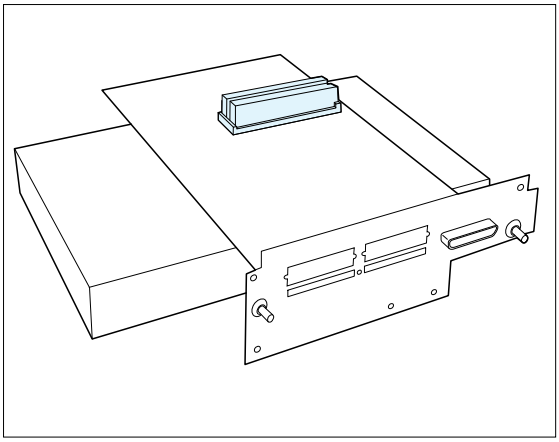
SIMMs and controller boards are sensitive to static electricity. Before installing a SIMM, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, again discharge any static electricity.

Never remove the printer controller board while the printer is plugged in.

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

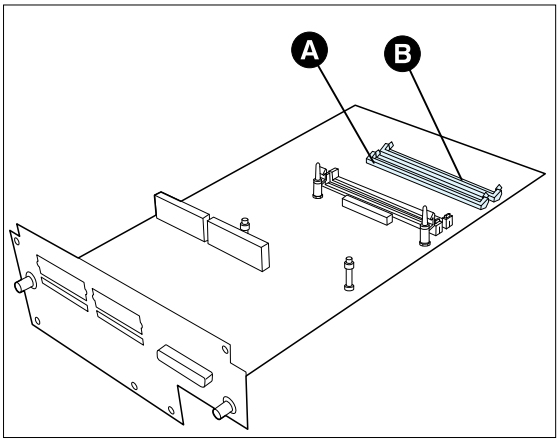


2 **Loosen the thumb screws and pull out the controller board.**



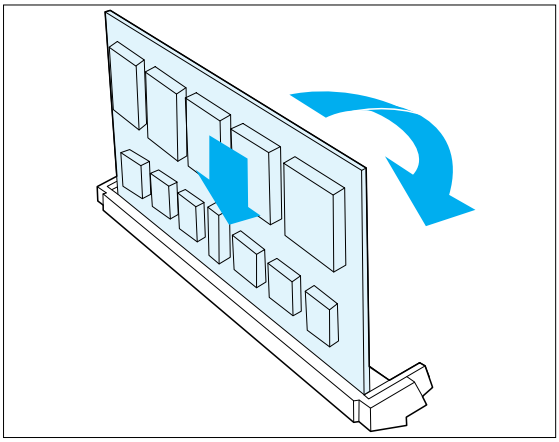
3 **Place the controller board on a ream of paper.**

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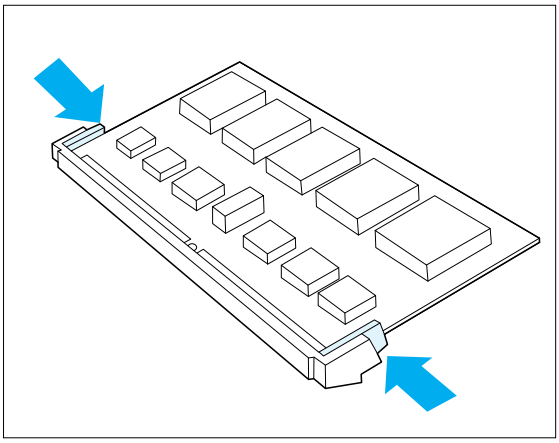


4 **Select an appropriate SIMM slot to use.**

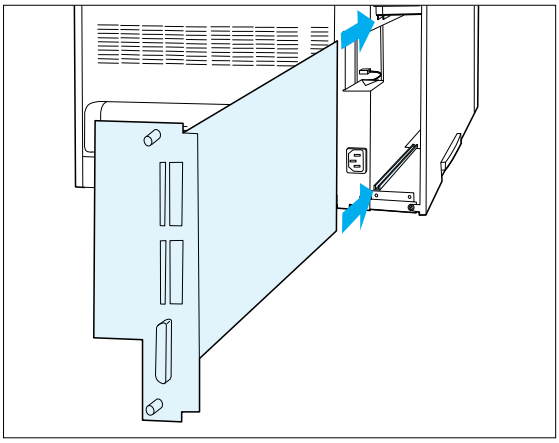
Slots SIM0 (A) and SIM1 (B) are interchangeable and are used for installing the PostScript SIMM.



5 **Insert the PostScript SIMM vertically into the appropriate SIMM slot and rotate it down into position.**



6 **Make sure that the clips on either side snap closed to lock the PostScript SIMM in place.**



7 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

8 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

9 **Print a Configuration Sheet to verify that the SIMM has been installed properly.**

A **Press Online ⇤ to take the printer offline.**

B **Press Menu ▤, then Down ⌄ or Up ⌃ until you see:**

```
Main Menu
Test Menu
```

C **Press Enter * and the message display changes to:**

```
Test Menu
Config. sheet
```

D **Press Enter * again to print a Configuration Sheet.**

E **After the Configuration Sheet prints, press Online ⇤ to put the printer back online.**



The Configuration Sheet should show the PostScript Menu and PostScript version.

10 **Install a Digital LN17 PostScript print driver now.**

Table 2 in the *Setting Up Guide* lists the LN17 PostScript printer drivers packaged with your printer. See the *Setting Up Guide* for installing driving software.

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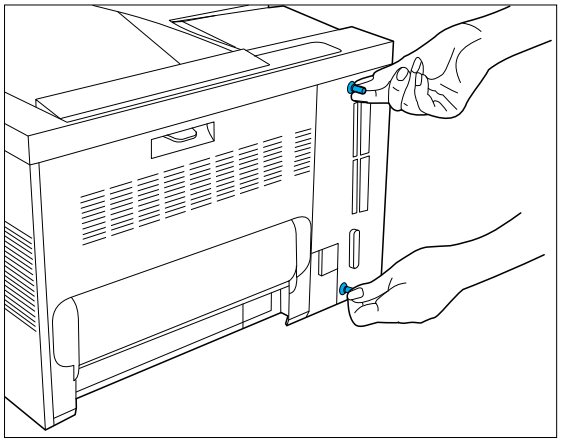
Removing the PostScript SIMM

Caution

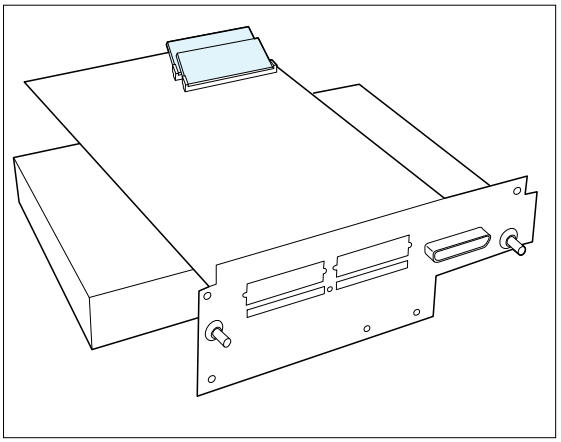
SIMMs and controller boards are sensitive to static electricity. Before removing a SIMM, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the removal, again discharge any static electricity.

Never remove the printer controller board while the printer is plugged in.

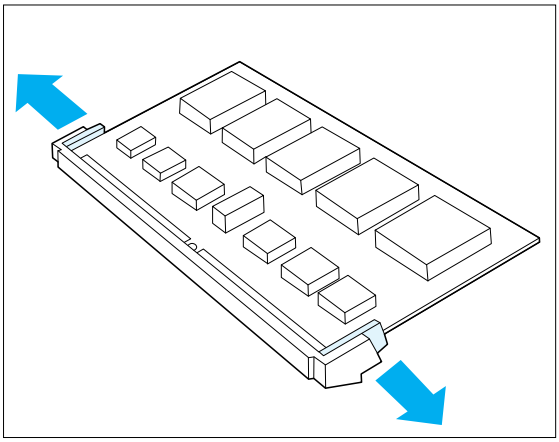
1 **Power OFF the printer and disconnect the power cord and any interface cables.**



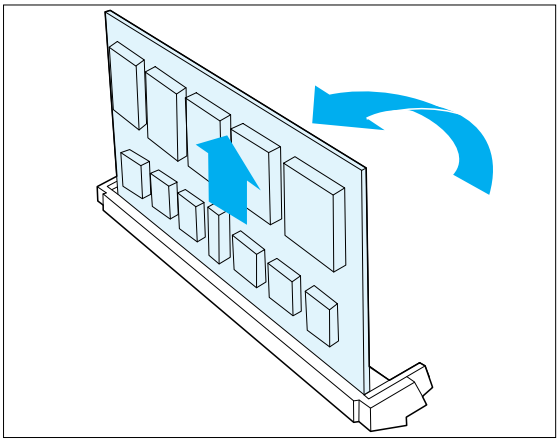
2 **Loosen the thumb screws and pull out the controller board.**



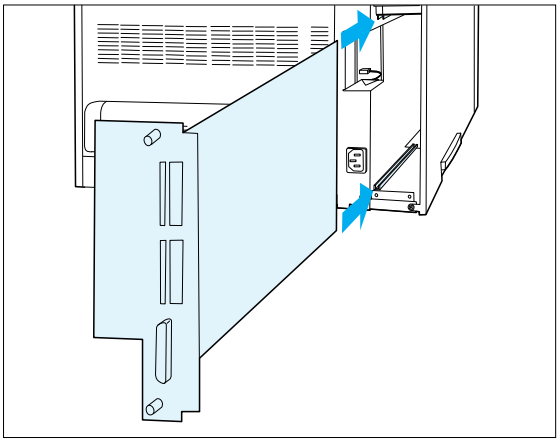
3 **Place the controller board on a ream of paper.**



4 **Carefully pull out on the locking clips to release the PostScript SIMM.**



5 **Rotate the PostScript SIMM up to a vertical position, then lift it out.**



6 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

7 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

8 **Press Online ← , then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

9 **Press Down ˅ and you see:**

```
Reset Menu
Reset Menus
```

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10 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets to factory defaults.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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Hard Drive

This section contains two sets of instructions:

- *"Installing the Hard Drive"* (below)
- *"Removing the Hard Drive"* (page C-19)

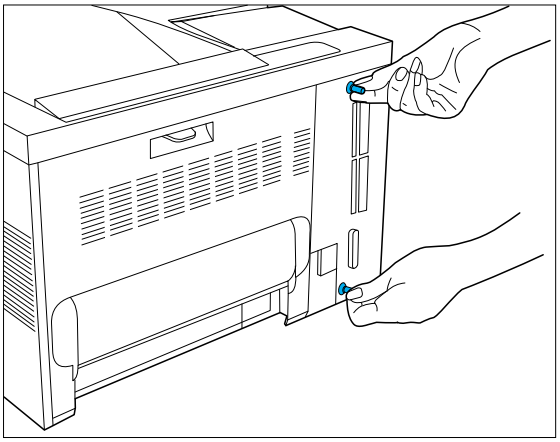
Caution

The hard drive and controller board are sensitive to static electricity. Before installing the hard drive, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, again discharge any static electricity.

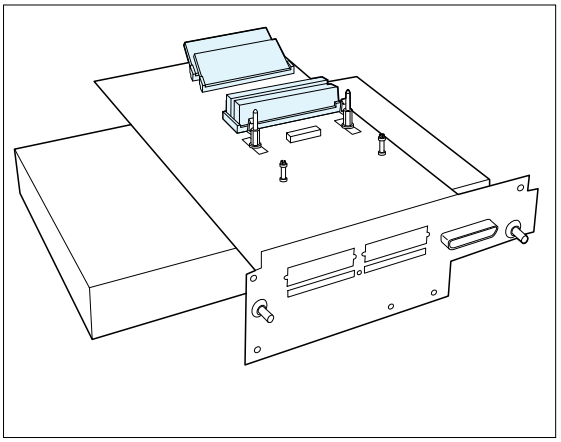
Never remove the printer controller board while the printer is plugged in.

Installing the Hard Drive

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

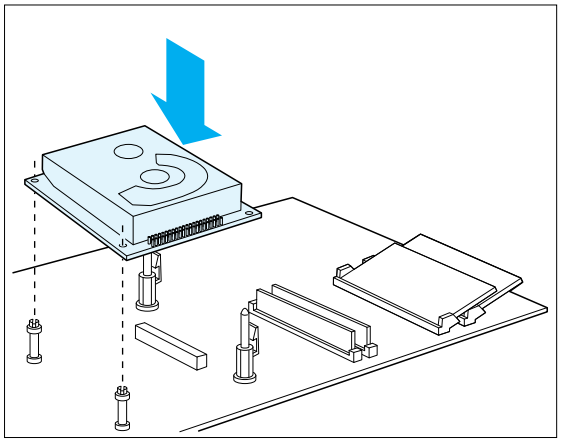


2 **Loosen the thumb screws and pull out the controller board.**

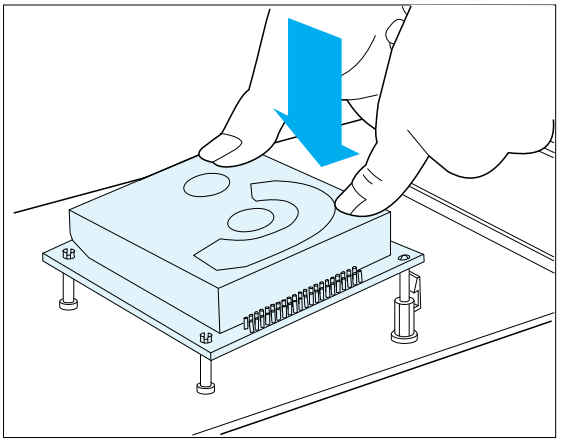


3 **Place the controller board on a ream of paper.**

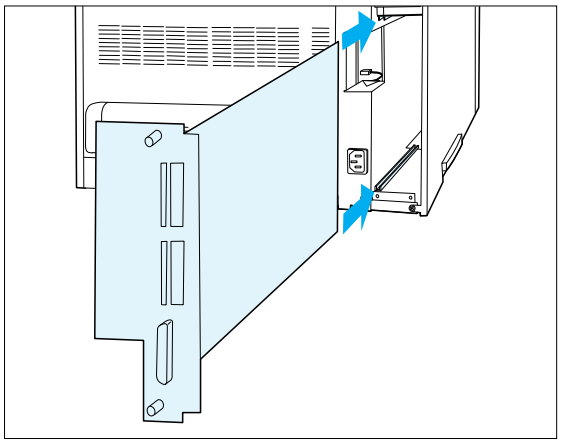
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4 **Align the hard drive connector to the controller connector (J180), and gently lay the hard drive on top of the four standoffs.**



5 **Push down on the drive until all four corners latch into place.**



6 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

7 **Replace the power and interface cables and power ON the printer.**

If the drive is already formatted, the Control Panel will display:

```
Online
Ready
```

If the drive is unformatted, the Control Panel will display:

```
Press ↑ to Init
Press ↓ to Abort
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

If you need to format the drive, continue to Step 8 on page C-18. Otherwise, skip to Step 9 on page C-18.

8 **Press Up ^ to format the hard drive.**

After the formatting is complete, the Control Panel displays:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

9 **Print a Configuration Sheet to verify that the hard drive has been installed properly.**

A **Press Online ← to take the printer offline.**

B **Press Menu ▤, then Down ˅ or Up ^ until you see:**

```
Main Menu
Test Menu
```

C **Press Enter * and the message display changes to:**

```
Test Menu
Config. sheet
```

D **Press Enter * again to print a Configuration Sheet.**

E **After the Configuration Sheet prints, press Online ← to put the printer back online.**



10 **Find the "Disk" line on the Configuration Sheet.**

If the hard drive has been properly installed, it is listed there (A). "Disk Spooling" also appears under the System menu. (Remove and reinstall the hard drive if you do not see both of these options listed.)

11 **Refer to** *Chapter 5: Using the Hard Drive/ Downloading Fonts* **for instructions on using the hard drive.**



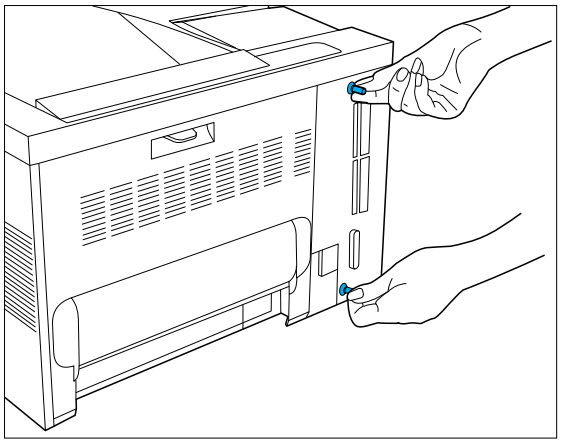
Note

Keep the original packaging material in case you ever need to remove the option.

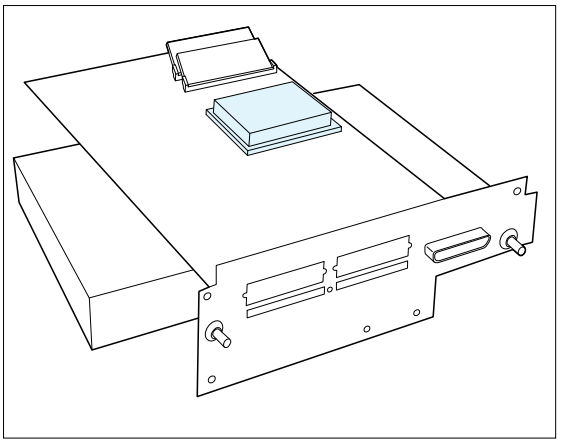
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Removing the Hard Drive

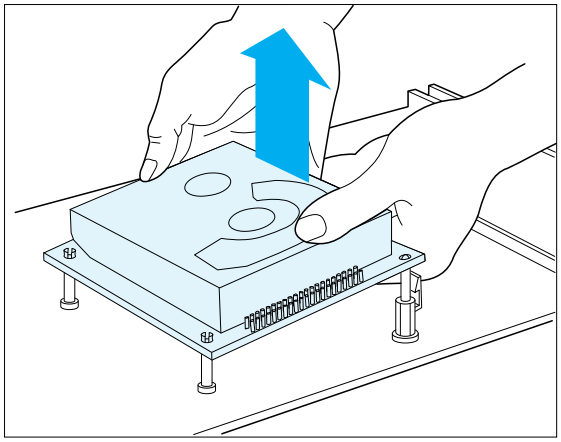
1 **Power OFF the printer and disconnect the power cord and any interface cables.**



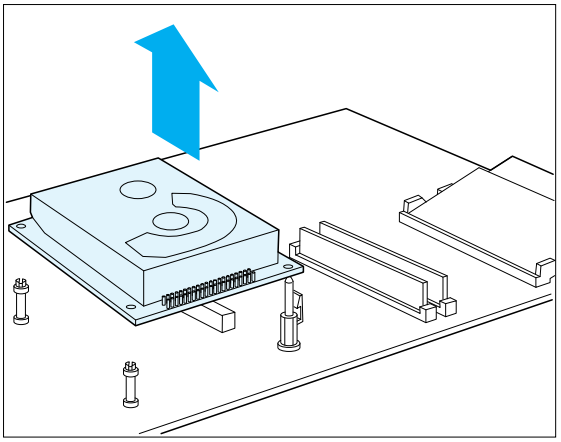
2 **Loosen the thumb screws and pull out the controller board.**



3 **Place the controller board on a ream of paper.**

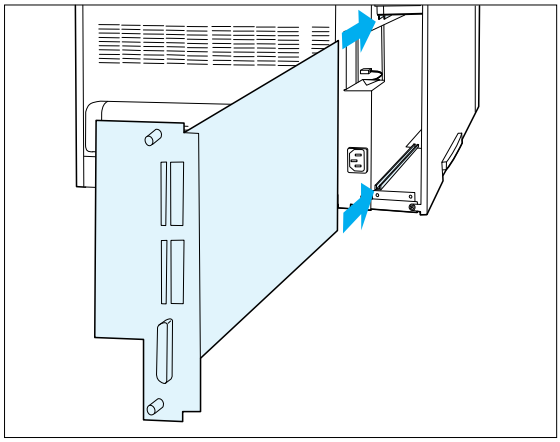


4 **Gently unlatch the hard drive from the standoffs and release the hard drive connector from the controller board connector.**



5 **Gently release the opposite end of the hard drive from the standoffs, then lift the hard drive from the controller board.**

If possible, store the hard drive in its original anti-static bag.



6 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

7 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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Duplex Module

This section contains two sets of instructions:

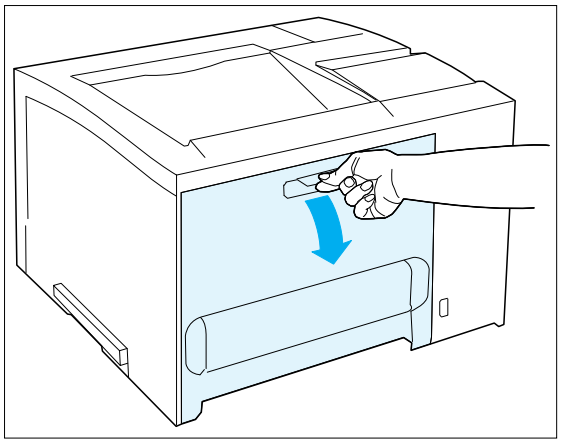
- *"Installing the Duplex Module"* (below)
- *"Removing the Duplex Module"* (page C-23)

Note

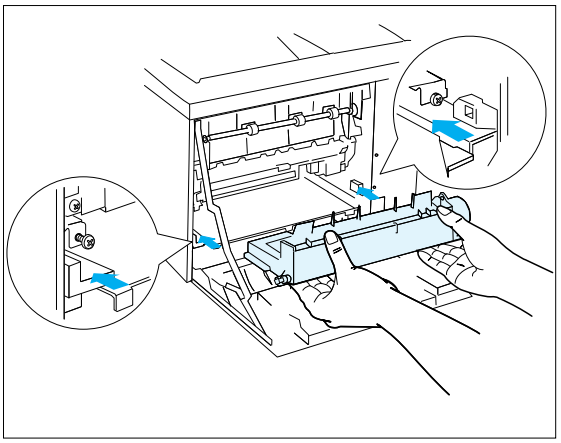
At least 6 MB of printer memory is recommended (but not required) for printing two-sided (duplex) jobs. See Appendix A: Ordering Printer Options *for ordering additional memory.*

Installing the Duplex Module

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

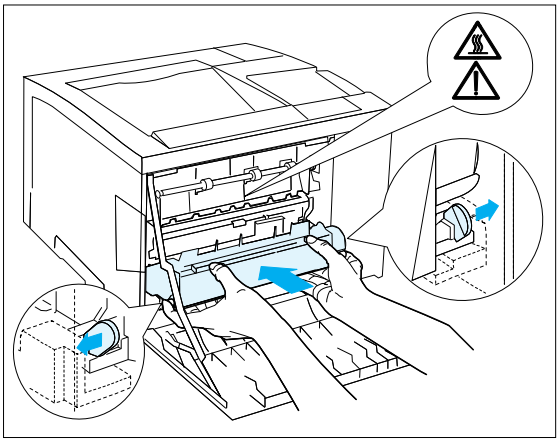


2 **Open the rear cover.**

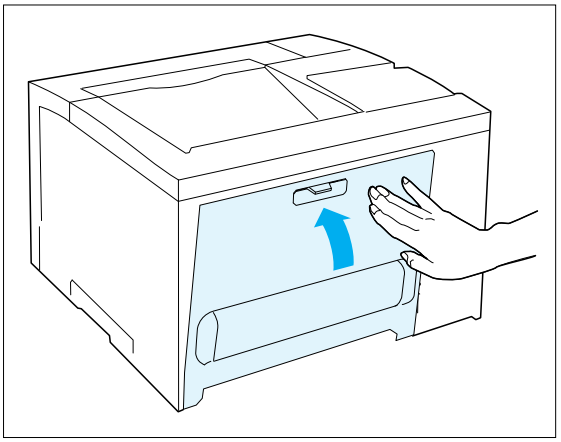


3 **Insert the Duplex Module through the guide channels.**

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4 **Make sure the green side-locks at both ends click into position.**



5 **Close the rear cover, plug in the power cord, and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

6 **Consult** *"Duplex (Two-Sided) Printing"* **(page 2-29) in** *Chapter 2: Paper Handling* **for instructions on two-sided printing.**

During two-sided printing, the paper partially enters the standard tray, then feeds back into the printer.

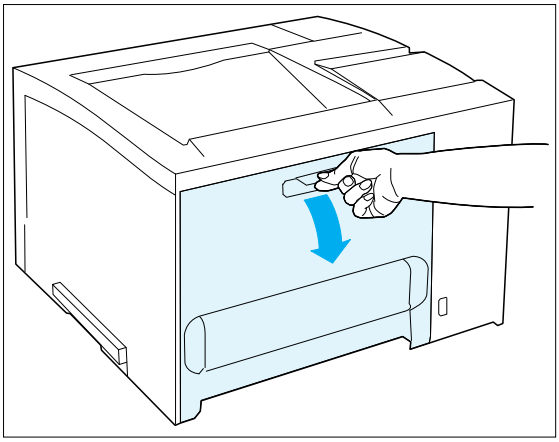
Note

Keep the original packaging material in case you ever need to remove the option.

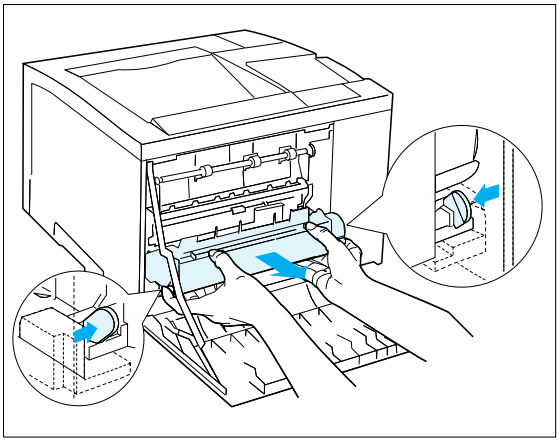
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Removing the Duplex Module

1 **Power OFF the printer and disconnect the power cord and any interface cables.**



2 **Open the rear cover.**



3 **Remove the Duplex Module by pushing the green lock buttons on either side of it.**

Be careful not to touch the metal part of the motor at the right end of the duplex module—it is hot after continuous two-sided printing.

Store the Duplex Module in its original packaging.

4 **Close the rear cover, plug in the power cord, and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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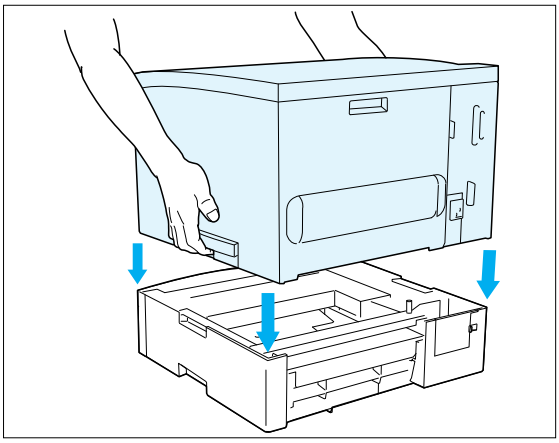
500-sheet Paper Deck and Cassette

This section contains three sets of instructions:

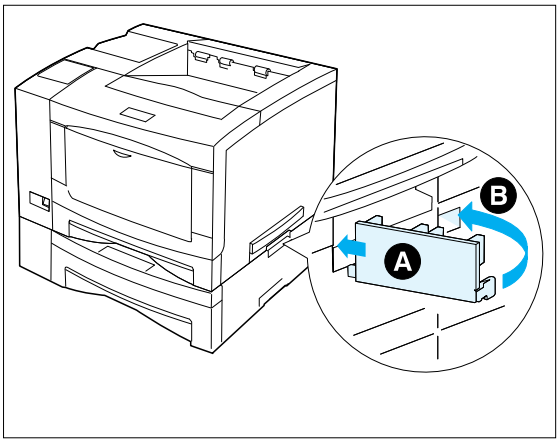
- *"Installing One 500-sheet Paper Deck and Cassette"* (below)
- *"Installing Two 500-sheet Paper Decks and Cassettes"* (page C-27)
- *"Removing a 500-sheet Paper Deck and Cassette"* (page C-31)

Installing One 500-sheet Paper Deck and Cassette

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

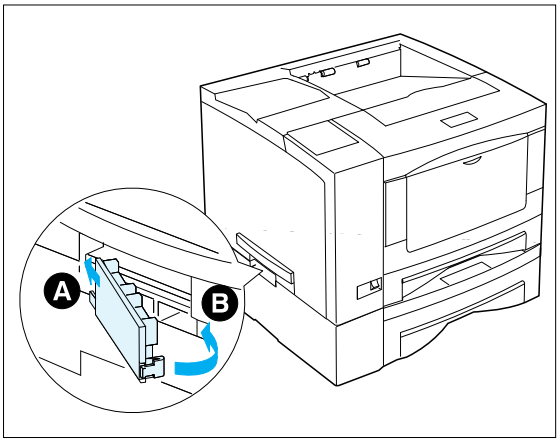


2 **Holding the printer by the recessed side hand holds, set it atop the Paper Deck, aligning the corners.**

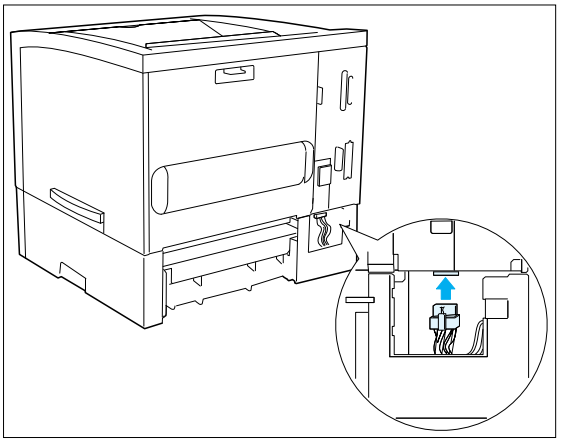


3 **Cover the right side hand hold with the joint tab, inserting (A) then (B).**

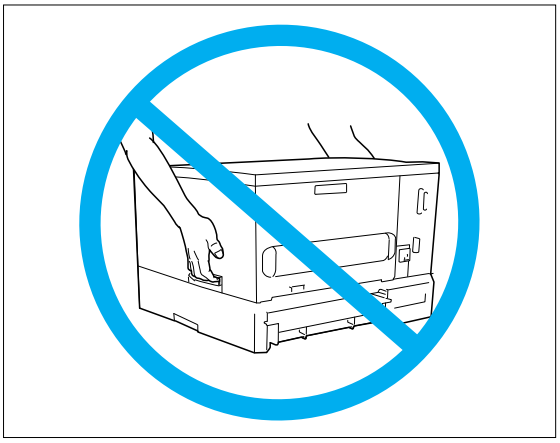
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4 **Cover the left side hand hold with the joint tab, inserting (A) then (B).**



5 **Remove the small cover at the back of the Paper Deck. Fit the connector firmly into the printer receptacle. Replace the small cover.**



Do not attempt to lift and carry the printer by yourself after installing the Paper Deck.

6 **Replace the power and interface cords, and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

7 **Press Online ↤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

8 **Press Down ⌄ and you see:**

```
Reset Menu
Reset Menus
```

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9 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets the Source Mapping (PCL Menu) settings to include the lower tray just installed.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

To enable automatic tray switching with PostScript jobs, turn `Tray Switching` *in the* `PostScript` *menu to a value that includes the newly installed tray.*

10 **Consult the section** *"Using the Main Tray or Lower Tray"* **(page 2-5) for instructions on loading paper in the lower tray.**

11 **Consult the section** *"Automatic Tray Switching"* **(page 2-13) for instructions on engaging tray switching between the lower tray and other printer trays.**

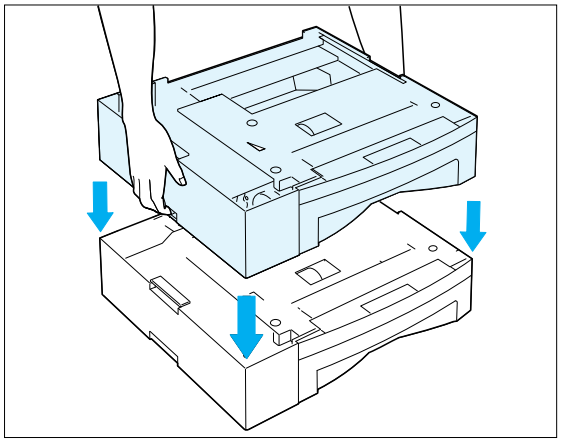
Note

Keep the original packaging material in case you ever need to remove the option.

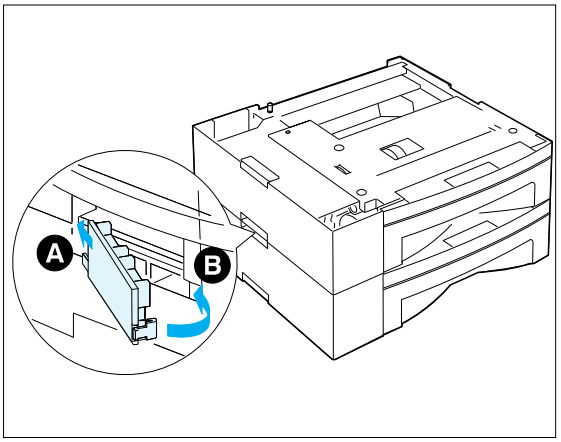
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Installing Two 500-sheet Paper Decks and Cassettes

1 **Power OFF the printer and disconnect the power cord and any interface cables.**

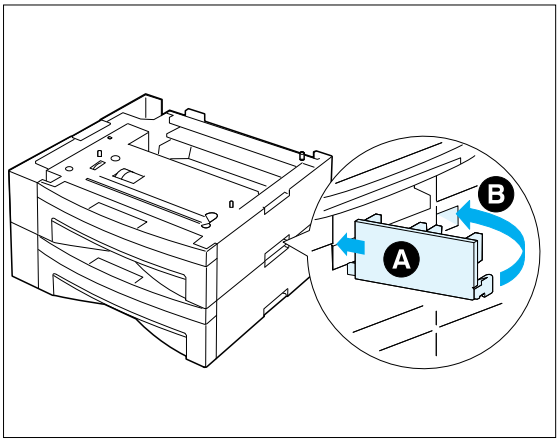


2 **Holding the top Paper Deck by the recessed side hand holds, set it atop the bottom Paper Deck, aligning the corners.**

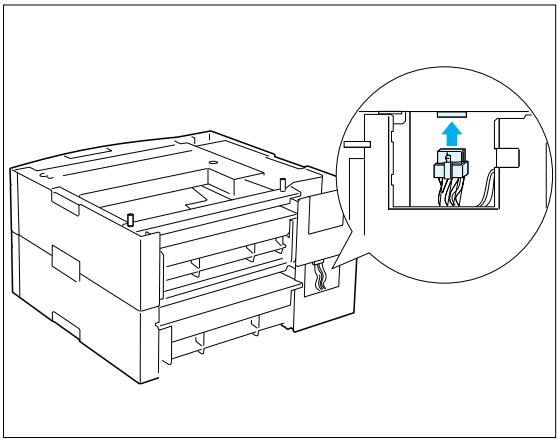


3 **Cover the left side hand hold with the joint tab, inserting (A) then (B).**

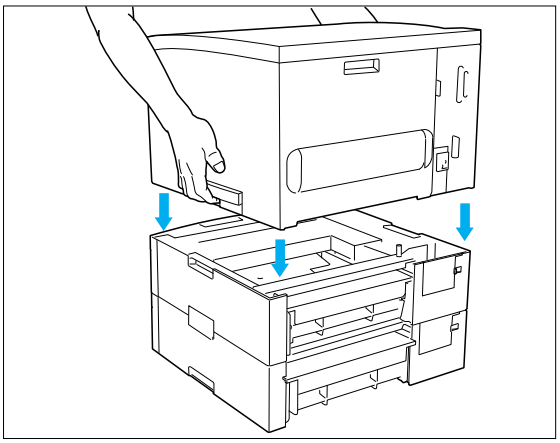
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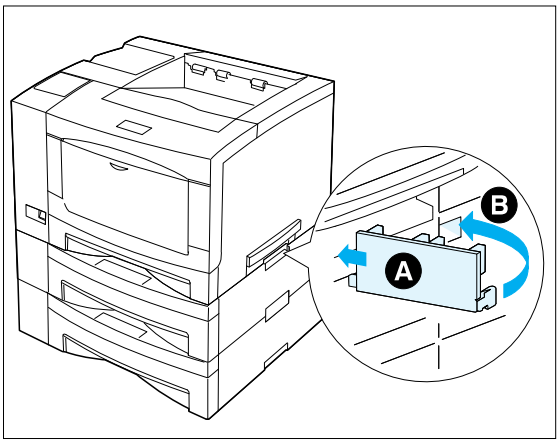
4 **Cover the right side hand hold with the joint tab, inserting (A) then (B).**



5 **Remove the small cover at the back of the bottom Paper Deck. Fit the connector firmly into the top Paper Deck receptacle. Replace the small cover.**

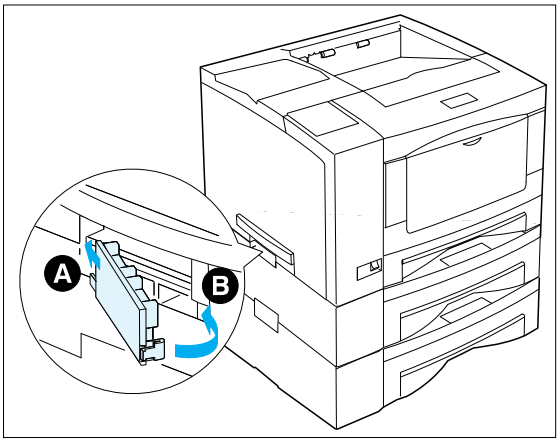


6 **Holding the printer by the recessed side hand holds, set it atop the top Paper Deck, aligning the corners.**

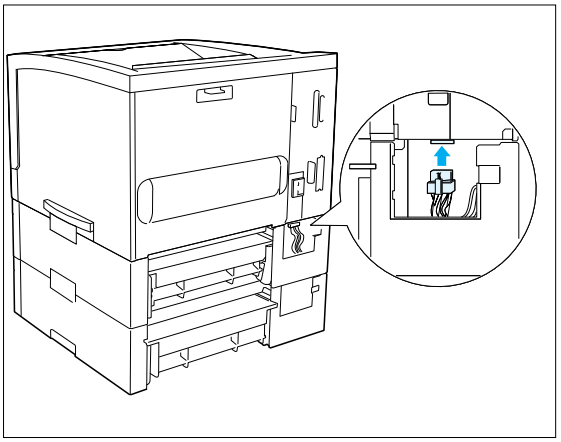


7 **Cover the right side hand hold with the joint tab, inserting (A) then (B).**

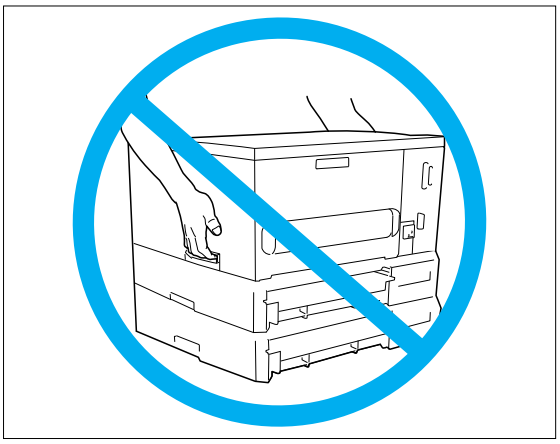
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8 **Cover the left side hand hold with the joint tab.**



9 **Remove the small cover at the back of the top Paper Deck. Fit the connector firmly into the printer receptacle. Replace the small cover.**



Do not attempt to lift and carry the printer by yourself after installing the Paper Decks.

10 **Replace the power and interface cords, and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

11 **Press Online ↤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

12 **Press Down ⌄ and you see:**

```
Reset Menu
Reset Menus
```

13 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets the Source Mapping (PCL Menu) settings to include the lower trays just installed.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

To enable automatic tray switching with PostScript jobs, turn `Tray Switching` *in the* `PostScript` *menu to a value that includes the newly installed trays.*

14 **Consult the section** *"Using the Main Tray or Lower Tray"* **(page 2-5) for instructions on loading paper in the 500-sheet Paper Deck and Cassette (lower tray).**

15 **Consult the section** *"Automatic Tray Switching"* **(page 2-13) for instructions on engaging tray switching between the lower tray and other printer trays.**



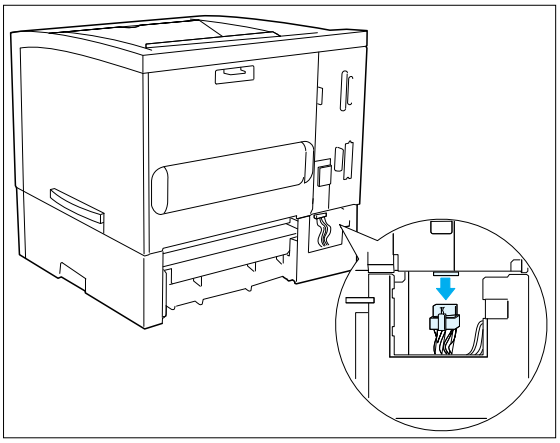
Note

Keep the original packaging material in case you ever need to remove the option.

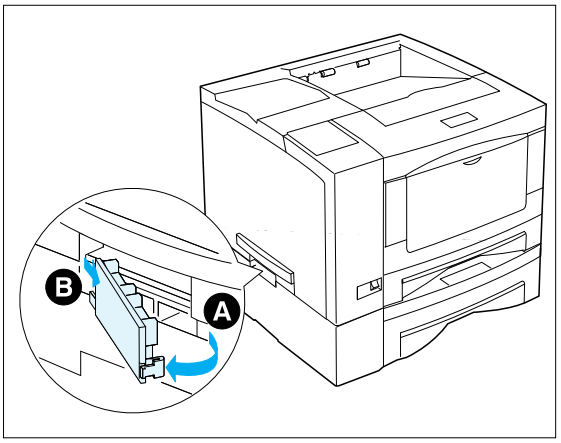
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Removing a 500-sheet Paper Deck and Cassette

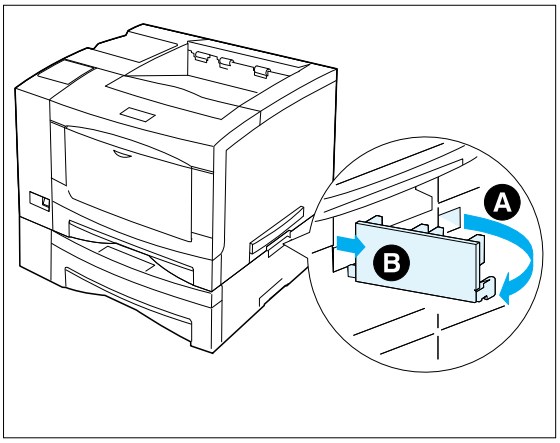
1 **Power OFF the printer and disconnect the power cord and any interface cables.**



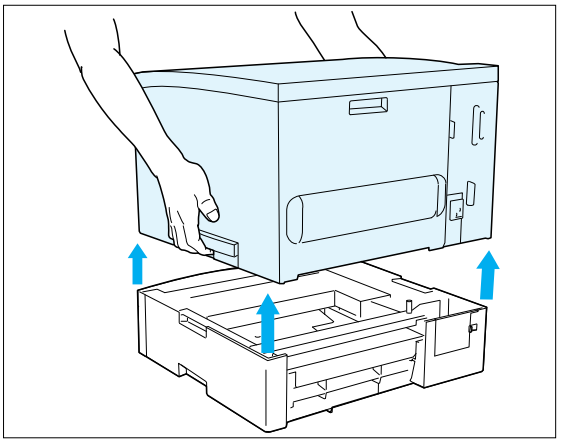
2 **Remove the small cover at the back of the Paper Deck, then unplug the connector from the printer. Replace the small cover.**



3 **Remove the left joint tab joining the printer to the Paper Deck, removing (A) then (B).**



4 **Remove the right joint tab joining the printer to the Paper Deck, removing (A) then (B).**



5 **Holding the printer by the recessed side hand holds, lift it up off the Paper Deck.**

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6 **If two Paper Decks are installed, detach the Paper Decks from each other. Otherwise, continue to Step 7.**

A **Remove the joint tabs joining the two Paper Decks.**

B **Disconnect the plug of the bottom Paper Deck from the receptacle of the upper Paper Deck.**



Be sure to keep the joint tabs. You will need them to reinstall the Paper Deck(s).

7 **Replace the power and interface cords, and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

8 **Press Online ⇤, then Reset ⇄ and you see:**

```
Reset Menu
Reset Printer
```

9 **Press Down ⌄ and you see:**

```
Reset Menu
Reset Menus
```

10 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets the Source Mapping (PCL Menu) and Tray Switching (PostScript Menu) settings to factory defaults.

When the reset is finished, the display changes to:

```
Reset Menu
Reset Menus
```

11 **Press Esc ↰, then Online ⇤ to bring the printer back online.**

You will see:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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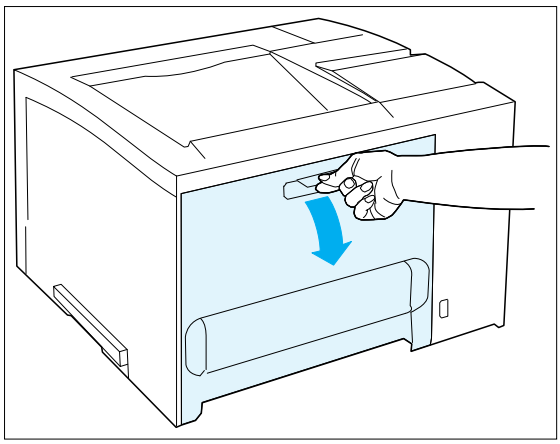
Offset Catch Tray (OCT)

This section contains two sets of instructions:

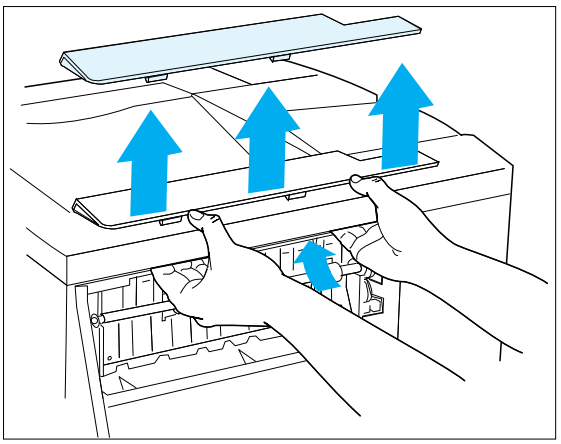
- *"Installing the OCT"* (below)
- *"Removing the OCT"* (page C-36)

Installing the OCT

1 **Power OFF the printer and disconnect the power cord and any interface cables.**



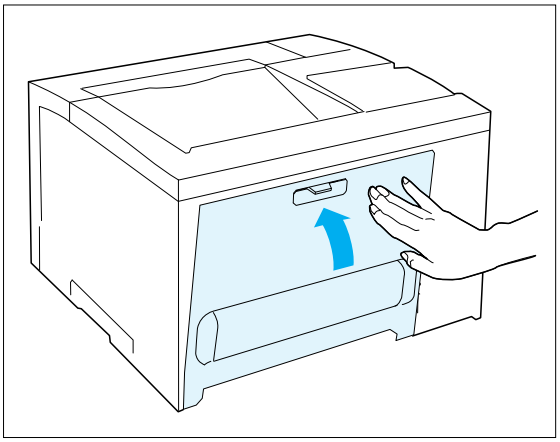
2 **Open the rear cover.**



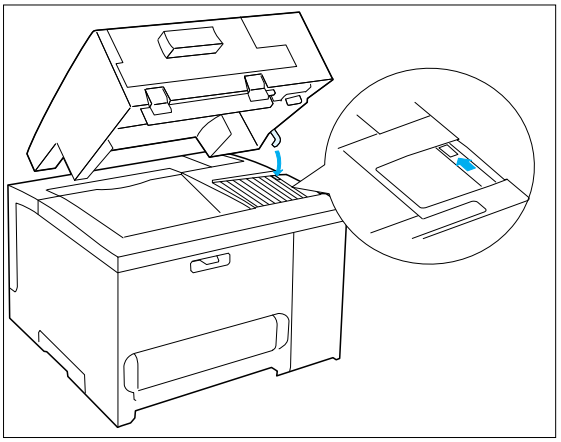
3 **Remove the option interface cover by pushing up on it from the underside.**

Keep the option interface cover in a safe place. You will need to replace it if you ever remove the option.

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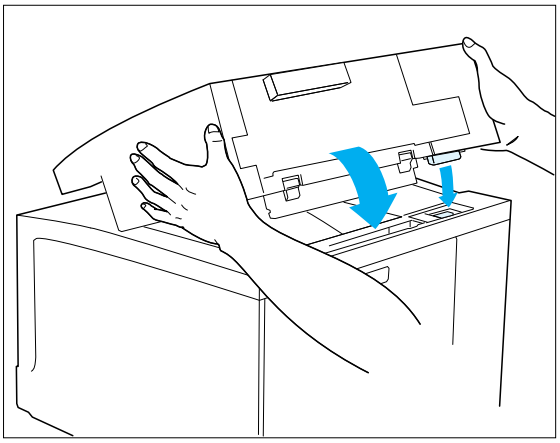


4 **Close the rear cover.**



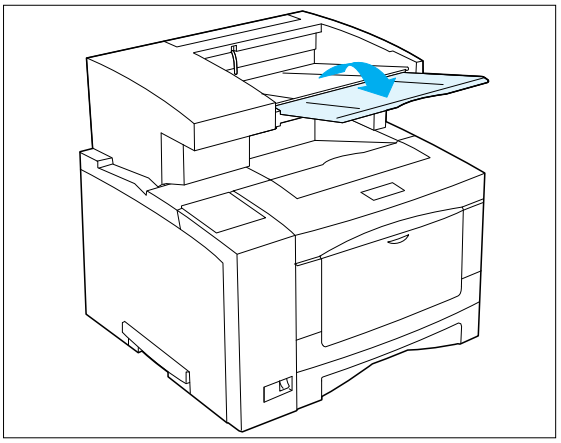
5 **Grasping the OCT by the sides, insert its positioning hook into the outer-most slit in the exhaust grill on top of the printer.**

To avoid damage to the positioning hook, do not twist the OCT to the right or left while lowering it into position.



6 **Gently guide the OCT down to the printer, aligning the OCT connector plug with the receptacle on the printer.**

Make sure the OCT is firmly seated.



7 **Flip open the output tray on the OCT.**

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8 **Reconnect the power cord and interface cable(s) and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

9 **Consult** *"Using the Offset Catch Tray (OCT)"* **(page 2-26) for usage instruction.**



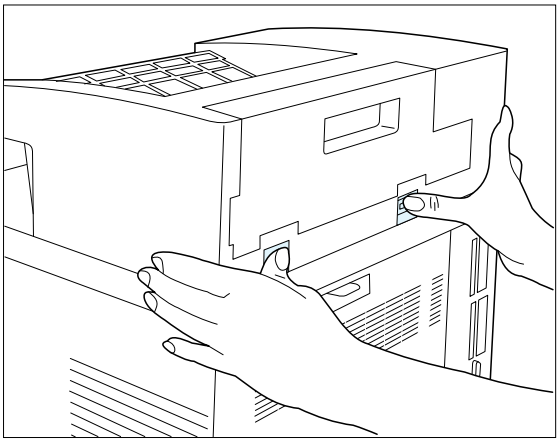
Note

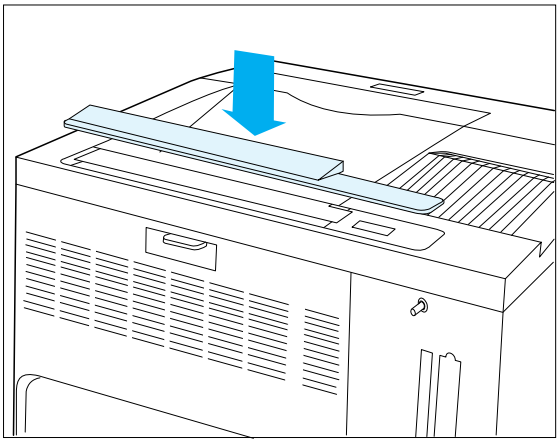
Keep the original packaging material in case you ever need to remove the option.

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Removing the OCT

1 **Power OFF the printer and disconnect the power cord and any interface cables.**





2 **Press the release buttons with your thumbs and push up on the OCT to remove it.**

To avoid damage to the positioning hook, do not twist the OCT to the right or left when pushing up to remove it.

Store the OCT in its original packaging materials, or in a dry, dust-free place.

3 **Replace the option interface cover which was removed and stored when the option was first installed.**

4 **Power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

5 **Press Online ↤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

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6 **Press Down ˅ and you see:**

```
Reset Menu
Reset Menus
```

7 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer changes the default Output Bin setting to *Standard*.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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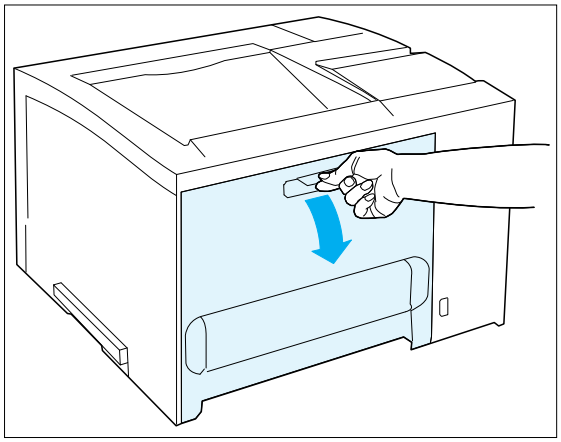
Mailbox/ Collator

This section contains two sets of instructions:

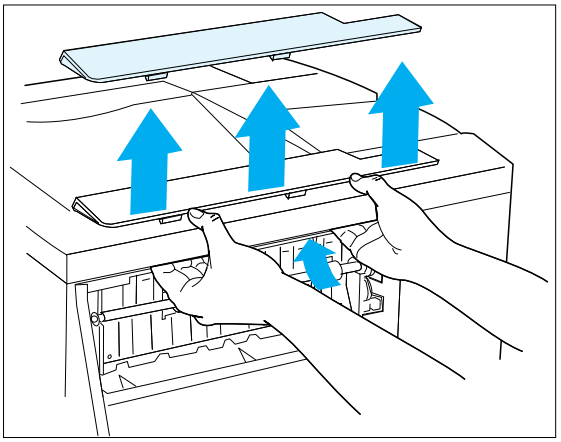
- *"Installing the Mailbox/Collator"* (below)
- *"Removing the Mailbox/Collator"* (page C-41)

Installing the Mailbox/Collator

1 **Power OFF the printer and disconnect the power cord and any interface cables.**



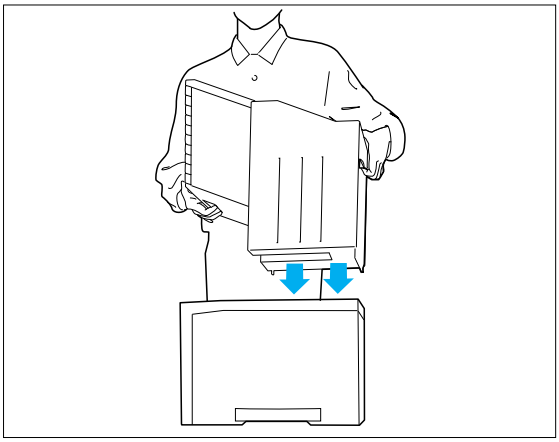
2 **Open the rear cover.**



3 **Remove the option interface cover by pushing up on it from the underside. Then close the rear cover.**

Keep the option interface cover in a safe place. You will need to replace it if you ever remove the option.

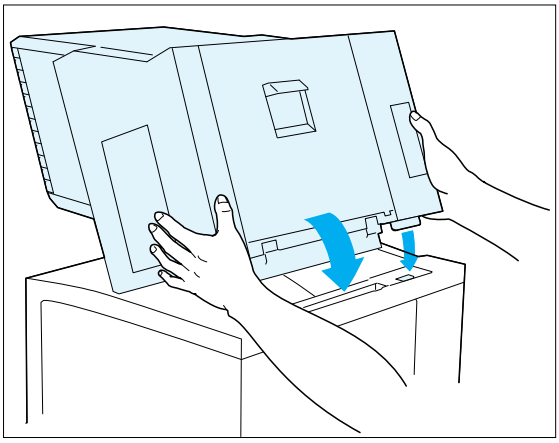
kug-appc Page 39 Thursday, March 6, 1997 4:51 PM

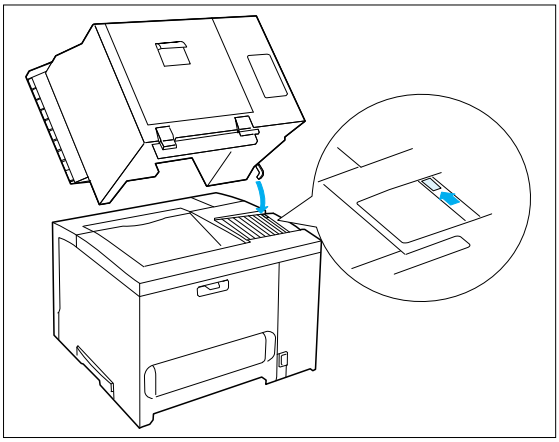


4 **Unpack the Mailbox/Collator and grasp it by the front and rear hand holds.**

Do not allow the rear door of the Mailbox/Collator to open.

If you must set the Mailbox/Collator down, lay it on its right side.



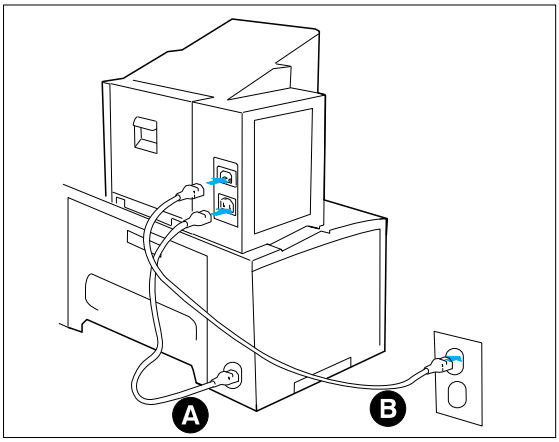


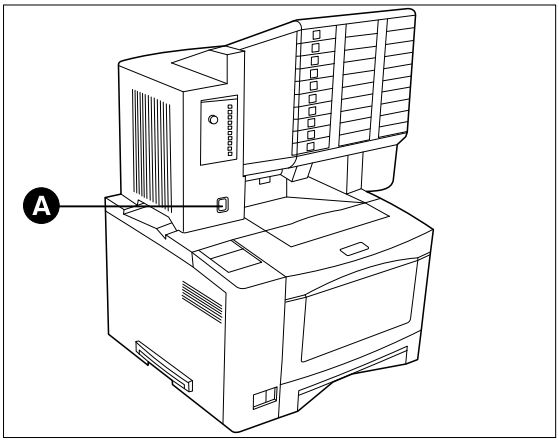
5 **Insert the Mailbox/Collator positioning hook into the outer-most slit in the exhaust grill on top of the printer.**

To avoid damage to the positioning hook, do not twist the Mailbox/ Collator to the right or left while lowering it into position.

6 **Gently guide the Mailbox/Collator down to the printer, aligning the Mailbox/ Collator connector plug with the receptacle in the printer.**

Make sure the Mailbox/Collator is firmly seated.





7 **Attach the power cords.**

A **Plug one end of the short (60 cm/2 foot) Mailbox/Collator cord (A) into the AC receptacle on the printer, and the other end into the lower AC receptacle on the Mailbox/Collator.**

B **Plug one end of the printer power cord (B) into the upper AC power receptacle on the Mailbox/Collator, and the other end into the wall.**

8 **Power ON the Mailbox/Collator (A) first, and then power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

9 **Consult** *"Using the Mailbox/Collator"* **(page 2-19) for usage instruction.**



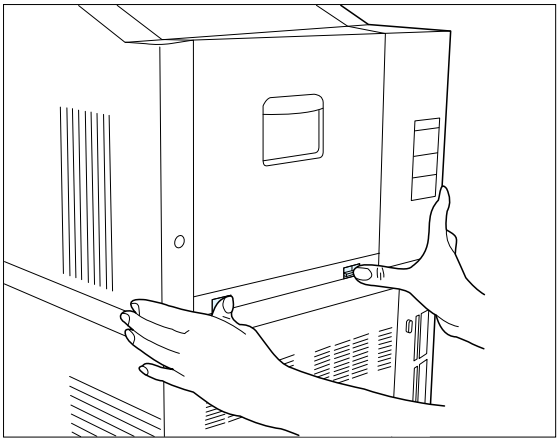
Note

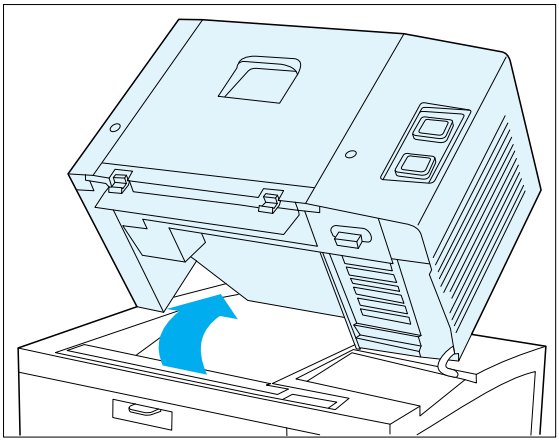
Keep the original packaging material should you ever need to remove the option.

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Removing the Mailbox/Collator

1 **Power OFF the printer and disconnect both power cords and any interface cables.**





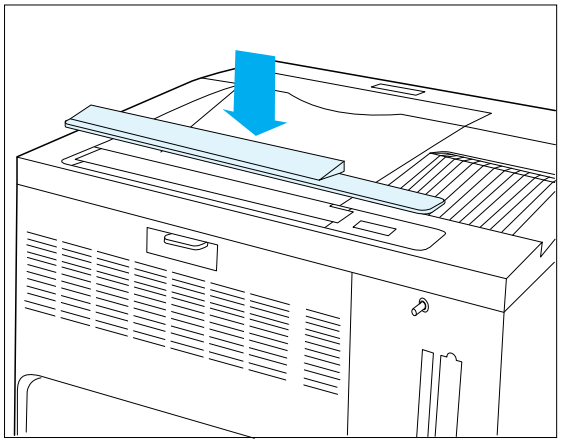
2 **Press the release buttons with your thumbs and push up on the Mailbox/ Collator to remove it.**

To avoid damage to the positioning hook, do not twist the Mailbox/ Collator to the right or left when pushing up to remove it.

3 **Carefully lift the Mailbox/Collator off the printer, rotating it away from the rear of the printer.**

The Mailbox/Collator is top-heavy. Carefully control its movement as you rotate it.

Store the Mailbox/Collator in its original packaging materials, or in a dry, dust-free place.



4 **Replace the option interface cover which was removed and stored when the option was first installed.**

5 **Power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

6 **Press Online ↤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

7 **Press Down ˅ and you see:**

```
Reset Menu
Reset Menus
```

8 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer changes the default Output Bin setting to *Standard*.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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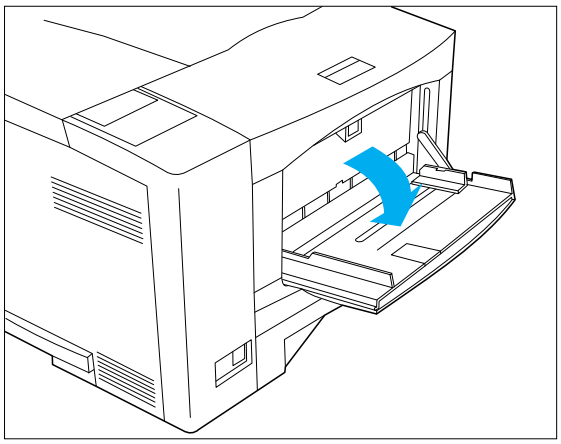
Envelope Feeder

This section contains two sets of instructions:

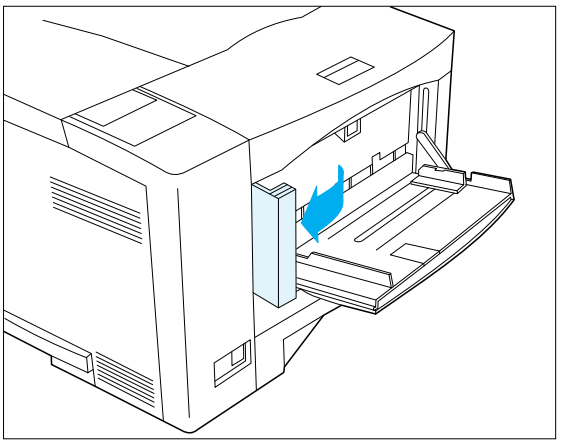
- *"Installing the Envelope Feeder"* (page C-43)
- *"Removing the Envelope Feeder"* (page C-46)

Installing the Envelope Feeder

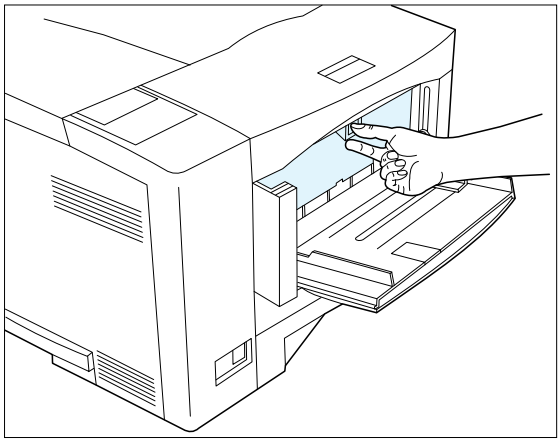
1 **Power OFF the printer and disconnect both power cords and any interface cables.**



2 **Open the Front Tray.**

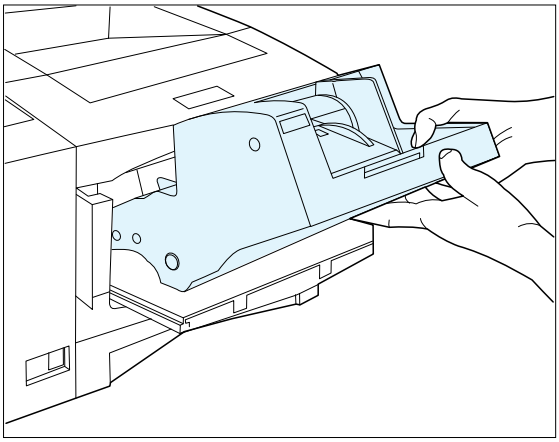


3 **Open the hinged clasp at the left side of the tray.**

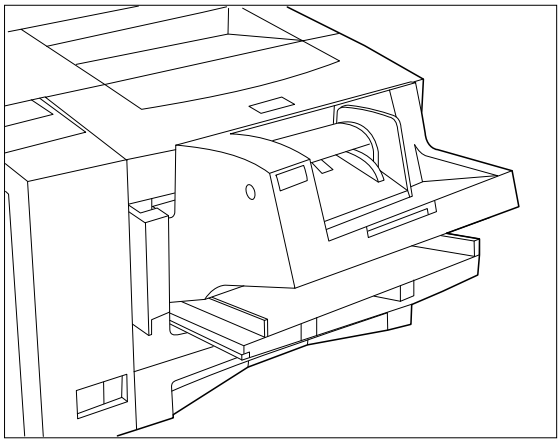


4 **Remove the face plate and store it.**

The face plate is re-installed after removing the feeder.



5 **Angle the Envelope Feeder into the printer.**



6 **Allow the Envelope Feeder to rest down at its seated position.**

7 **Reconnect the power cord and interface cable(s) and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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8 **Press Online ⇤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

9 **Press Down ⌄ and you see:**

```
Reset Menu
Reset Menus
```

10 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets the Source Mapping (PCL Menu) settings to factory defaults, including the Envelope Feeder.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

11 **Consult *"Using the Envelope Feeder"* (page 2-27) in Chapter 2: Paper Handling for usage instruction.**



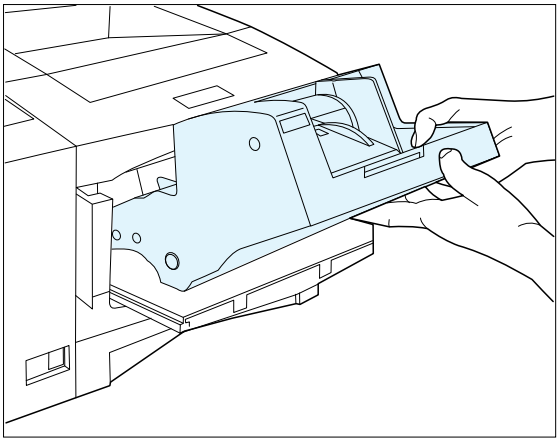
Note

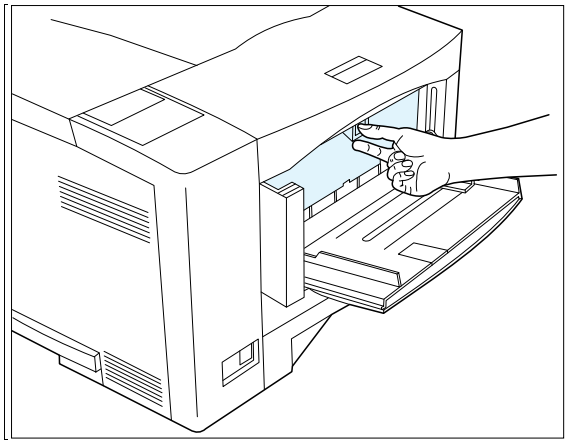
Keep the original packaging material in case you ever need to remove the option.

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Removing the Envelope Feeder

1 **Power OFF the printer and disconnect both power cords and any interface cables.**

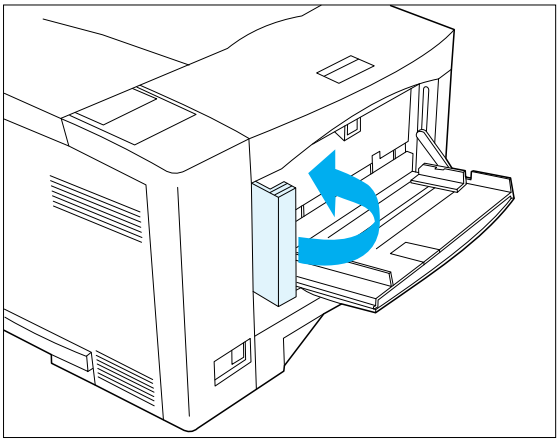




2 **Lift the Envelope Feeder up and out from the printer.**

Store the Envelope Feeder in its original packaging materials, or in a dry, dust-free place.

3 **Re-attach the face plate that was removed when the Envelope Feeder was installed.**



4 **Close the hinged clasp at the left side of the Front Tray.**

Close the Front Tray if not needed.

5 **Reconnect the power cord and interface cable(s) and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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6 **Press Online ⇤, then Reset ↵ and you see:**

```
Reset Menu
Reset Printer
```

7 **Press Down ⌄ and you see:**

```
Reset Menu
Reset Menus
```

8 **Press Enter * and the message display changes to:**

```
Reset Menus
Please Wait...
```

This message displays while the printer resets the Source Mapping (PCL Menu) settings to factory defaults.

When the reset is finished, the display changes to:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

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Digital Network Interface Card (DNIC)

This section contains two sets of instructions:

- *"Installing the DNIC"* (page C-49)
- *"Removing the DNIC"* (page C-53)

These instructions apply to Ethernet (DNIC-E'NET) and LocalTalk (DNIC-L'TALK).



Caution

The DNIC and controller board are sensitive to static electricity. Before installing the DNIC, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, again discharge any static electricity.

Never remove the printer controller board while the printer is plugged in.



Note

The printer is capable of supporting two DNICs; however, do not install two of the same DNICs in the printer.

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Installing the DNIC

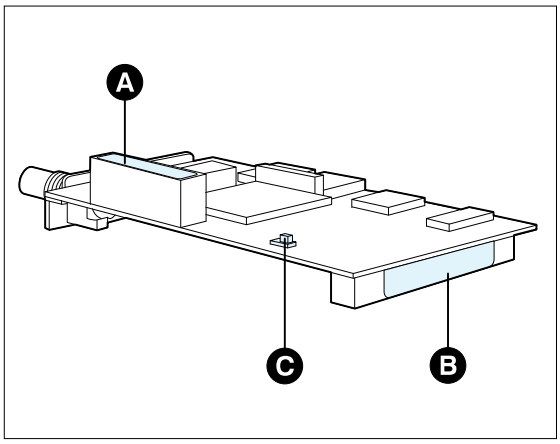


Note

Be sure to read Chapter 2 of the DNIC-E'NET Configuration Guide for important network connection instructions.

1 Power OFF the printer and disconnect the power cord and any interface cables.

- If installing the DNIC-E'NET, continue with Step 2.
- If installing the DNIC-L'TALK, skip to Step 3.



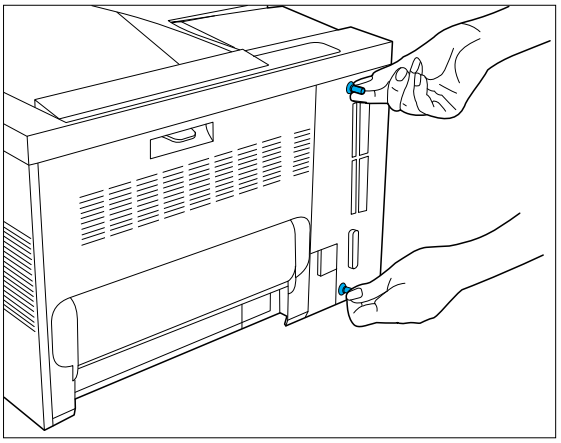
2 Note the DNIC-E'NET serial number (A) and Ethernet address (B).



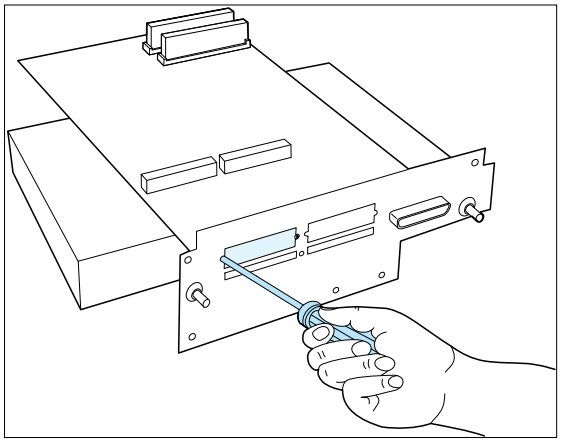
This information will not be accessible after the card is installed.



Pins 2 and 3 on JX1 (C) must be strapped together for proper operation of the DNIC-E'NET.

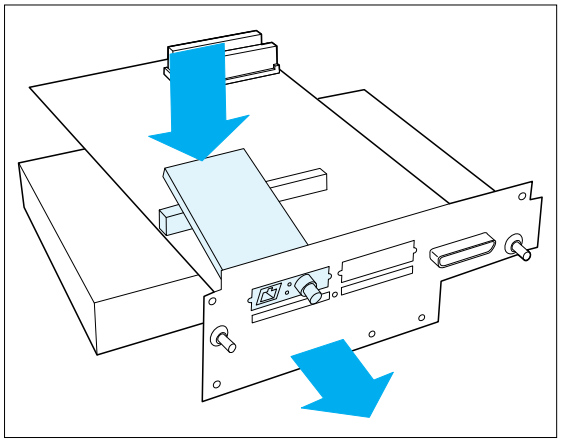


3 Loosen the thumb screws and pull out the controller board.

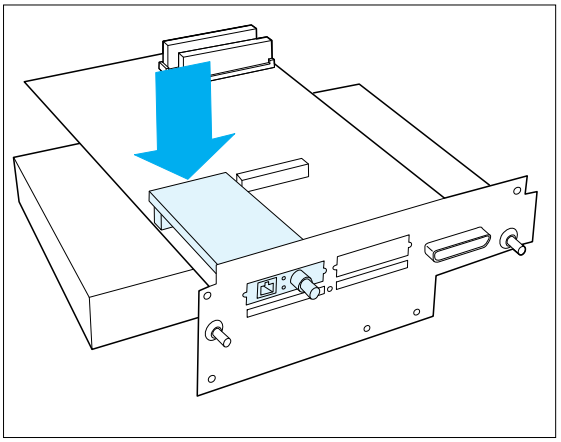


4 **Place the controller board on a ream of paper and remove the screws and faceplate from the slot where you will install the DNIC.**

Save the faceplate should you ever need to remove the DNIC.

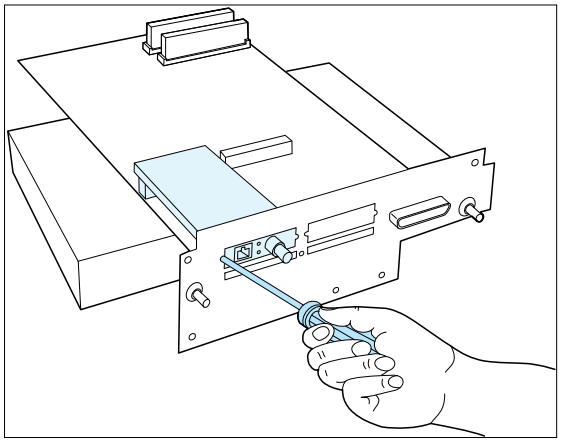


5 **Line up the DNIC connector to the slot in the controller board.**

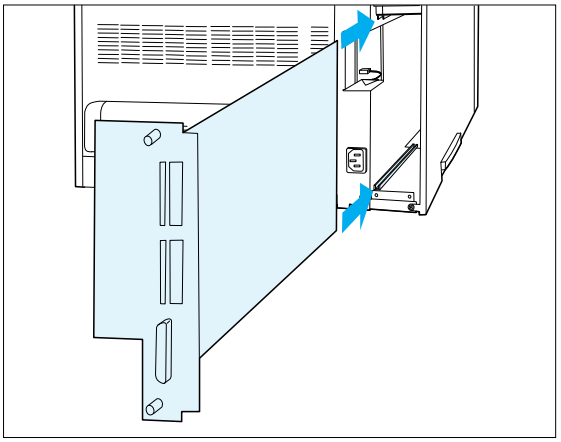


6 **Gently press the card down until it fits snugly in place.**

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7 **Secure the DNIC mounting bracket to the controller board with the screws removed in Step 4.**



8 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

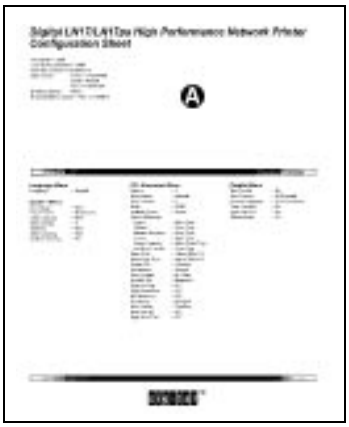
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9 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.



10 **Print a Configuration Sheet to verify that the DNIC has been installed properly. Applicable data should appear on the Configuration Sheet (A).**

A **Press Online ← to take the printer offline.**

B **Press Menu ▤, then Down ˅ or Up ^ until you see:**

```
Main Menu
Test Menu
```

C **Press Enter * and the message display changes to:**

```
Test Menu
Config. sheet
```

D **Press Enter * again to print a Configuration Sheet.**

E **After the Configuration Sheet prints, press Online ← to put the printer back online.**



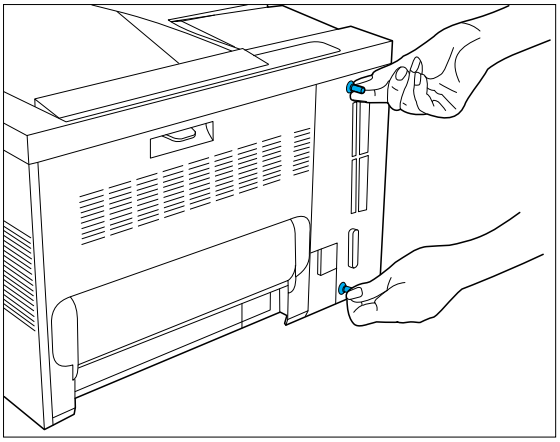
Note

Keep the original packaging material in case you ever need to remove the option.

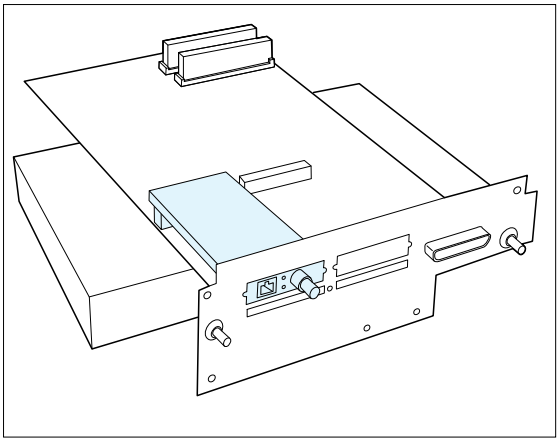
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Removing the DNIC

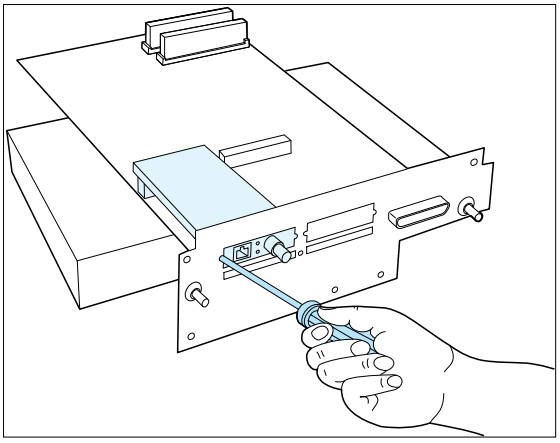
1 **Power OFF the printer and disconnect the power cord and any interface cables.**



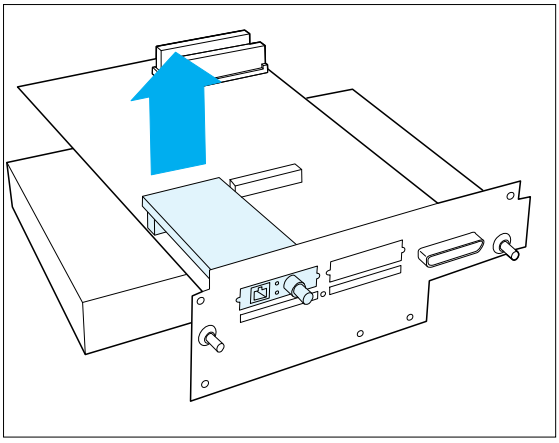
2 **Loosen the thumb screws and pull out the controller board.**



3 **Place the controller board on a ream of paper.**

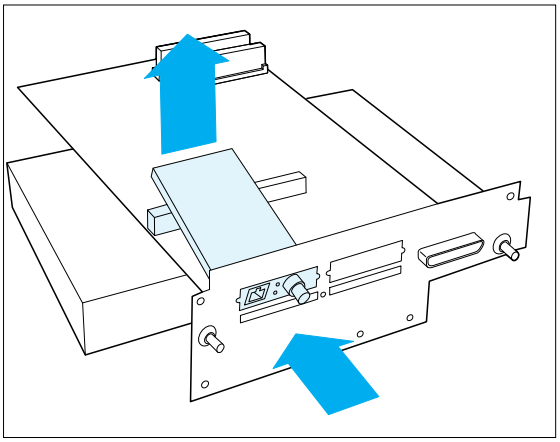


4 **Unscrew the DNIC mounting bracket from the controller board.**



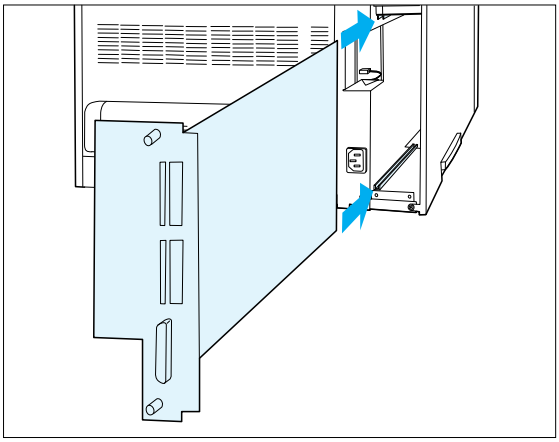
5 **Gently lift up on the card until it detaches from the controller board.**

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6 **Lift the card out and away from the slot in the controller board. Then replace the screws and faceplate that came with the printer.**

Store the DNIC in its original packaging materials, or in a dry, dust-free place.



7 **Replace the controller board, sliding it along the alignment channels. Then hand-tighten the thumb screws.**

8 **Replace the power and interface cables and power ON the printer.**

After warming up for a few minutes, the Control Panel displays the following message:

```
Online
Ready
```

If any other message is displayed, see Table 6.2 starting on page 6-6.

Appendix D

Control Panel Options

Table D.1, starting on page D-3, contains an alphabetical listing of all Control Panel options. For each option listed, you will find:

- The menu(s) under which the option is located
- The factory and default settings for the option.
 A boldfaced menu item means it is a factory setting. A menu item followed by an asterisk means a reset will default to this value. Example: For the option "Auto Job End" the selection **On*** is the factory setting (**bold**) and the reset default value (*).
- All possible settings for the option
- A description of the option

You can normally use your own applications to override many of the printer's default settings. For example, most applications allow you to choose how many copies of the print job you want. The number of copies you specify through your application will override the printer's default setting for the "Copies" option.

Figure D.1 below lists all Control Panel options whose settings you can normally override. (Only in the absence of information from the print job will the printer use the default settings for these options.)

Figure D.1 Control Panel settings (options) normally overridden by the print job

Copies	Page Protection
Default Source	Paper Size
Default Tray	Pitch
Duplex	Point Size
Edge to Edge	Print Quality
Font Number	Resolution
Font Source	Symbol Set
Orientation	System Language
Output Bin	Tray Switching

Table D.1 Control Panel menu options, settings, and descriptions

Menu Option, Location(s), Setting(s)	Description
Auto Continue *System Menu* **Off*** On	Controls whether the printer resumes printing after system errors occur. • When set to *Off*, the printer does not automatically resume. **Enter** * *must* be pressed before normal printer operations can continue. • When set to *On*, the printer automatically resumes operation after certain system errors if **Enter** * is not pressed within ten seconds. The *On* setting is useful in a networked environment.
Auto Job End *Parallel Menu* *Ethernet Menu* Off **On***	Controls automatic ending of a print job that does not finish printing. *With the Hard Disk option installed and* **Disk Spooling** *(page D-5) set to* On*,* **Auto Job End** *is always* On *(regardless of setting).*
Bidirectional *Parallel Menu* Off **On***	Activates two-way communications between the printer and your computer. The *On* setting enables the printer to send messages to your computer. ***Only set* Bidirectional *to* Off *if you have no software application that supports it.***
Bin Full† *Mailbox Menu* **Stop Printing*** **Send to Standard** † Appears only when the Mailbox/Collator option is installed.	Determines printer's behavior when printing an unsecured job and a mailbox bin is full.
Bin *N*† *Mailbox Menu* N = 1 to 10 † Appears only when the Mailbox/Collator option is installed.	Selects Bin 1 to Bin 10 prior to enabling or disabling a password.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Cancel PS Job† *Reset Menu* † Appears only when a PostScript job is received.	Cancels the current PostScript job.
Collator† *Mailbox Menu* † Appears only when the Mailbox/Collator option is installed.	Sets up and enables or disables a password for the collator.
Config. sheet *Test Menu*	Prints a Configuration Sheet showing the printer's current information and menu settings. *The Configuration Sheet is printed at* **Defaults** *size, regardless of actual paper size.* **Config. Sheet** will cause a printer reset.
Copies *PCL Emulat Menu* *PostScript Menu* **1*** - 99	Specifies number of times each page is printed.
Defaults *System Menu* Europe **USA**	Controls default paper size settings in various menus. • When set to *Europe*, **Paper Size** (page D-12), **Front Tray Size** (page D-8), and **Manual Size** (page D-10) options are set to *A4* (210x297), and **Form Length** (page D-7) is set to *64*. • When set to *USA*, **Paper Size** (page D-12), **Front Tray Size** (page D-8), and **Manual Size** (page D-10) options are set to *Letter* (8.5x11), and **Form Length** (page D-7) is set to *60*. *Perform a* **Reset Menus** *after changing the* **Defaults** *setting.*

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Default Source *PCL Emulat Menu* **Upper*** Manual Manual Envelope Lower Large Capacity Envelope Feeder	Specifies default paper source in PCL if none is specified by your software application.
Default Tray *PostScript Menu* **Main Tray*** Front Tray Lower 1 Tray† Lower 2 Tray† Envelope Feeder† † Appears only when the option is installed.	Specifies paper tray used if none is specified in your software application.
Demo Page *Test Menu*	Prints a page demonstrating the printer's capabilities. *Printing a Demo Page will cause a printer reset.*
Disable Password† *Mailbox Menu* † Appears only when the Mailbox/Collator option is installed.	Disables the password for a specific mailbox bin or for the collator bins.
Disk Spooling† *System Menu* **Off*** On † Appears only when the hard drive option is installed.	Controls spooling to the hard disk (if installed). • When set to *On*, data received and waiting to be processed from any port is spooled onto the hard disk and later retrieved for processing. • When set to *Off*, data received and waiting to be processed is kept in printer memory. Set **Disk Spooling** to *Off* to save time if spooling is already done outside the printer.

Table D.1 Page 3 of 16

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Duplex (PCL)† *PCL Emulat Menu* **Off*** Short Edge Bind Long Edge Bind † Appears only when the Duplex option is installed.	Enables and disables duplex printing for PCL jobs.
Duplex (PostScript)† *PostScript Menu* **Off*** Tumble Regular † Appears only when the Duplex option is installed.	Enables and disables duplex printing for PostScript jobs.
Edge to Edge *PCL Emulat Menu* **Off*** On	Enables and disables edge to edge printing. • When *On*, PCL jobs are printed to the edge of the paper. • When *Off*, PCL jobs are printed in normal printable area of the page (full page size minus a 1/6 inch margin at top, bottom, left, and right sides of page).
Enable Password† *Mailbox Menu* † Appears only when the Mailbox/Collator option is installed.	Enables a password for a specific mailbox bin or for the collator bins.
Env Feeder Size† *PCL Emulat Menu* *PostScript Menu* **Com-10*** *(USA)* C5 **DL*** *(Europe)* Monarch C6 † Appears only when the Envelope Feeder option is installed.	Informs the printer what size of envelope is currently loaded in the envelope feeder. Because the envelope feeder does not have a size sensor, this setting is required so that the printer is able to know when the size of envelope requested for printing is different than that loaded. When the sizes do not match, and the Page Size Cont option is set to *Off*, the printer displays a message asking for a change of envelope size; pressing **Enter** * causes printing to resume under the assumption that the correct size envelope has been loaded.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Ethernet Menu† *Interface Menu* † Appears only when the DNIC-E'NET option is installed.	Invokes the Ethernet Menu.
Font Number *PCL Emulat Menu* **0*** - 999	Specifies the ID of the default font in PCL. Only values valid for the **Font Source** location are displayed. For example, if you have *internal* fonts only, the maximum Font Number is 52. **Font Number** values are printed on the PCL Font List in the first column. Print a PCL Font List to find the correct number to use with this setting. *The* **Font Number** *setting returns to its factory setting* (0) *if* **Symbol Set** *(page D-17) is changed. If the* **Font Source** *setting specifies a location other than* Internal*,* **Font Number** *reverts to* 0 *automatically.*
Font Source *PCL Emulat Menu* **Internal*** Soft†	Location of the default font in PCL. *Internal* refers to the font set residing in the printer's permanent memory. These fonts are resident in the printer and cannot be altered. *The* **Font Source** *setting returns to its factory setting* (Internal) *if* **Symbol Set** *(page D-17) is changed. If the* **Font Source** *setting specifies a location other than* Internal*,* **Font Number** *reverts to* 0 *automatically.*
Format the Disk† *Test Menu* † Appears only when the hard drive option is installed.	Causes the hard disk to be formatted or reformatted. ***This action erases all data on the hard disk. It must therefore be confirmed twice before it is executed.***
Form Length *PCL Emulat Menu* 005 - 128 **64*** (Europe) **60*** (USA)	Number of lines per page used in PCL. The **Form Length** setting is automatically adjusted when **Paper Size** (page D-12) is changed. For example, if you set **Paper Size** to *A4* (210x297), **Form Length** is adjusted to *64* automatically. If **Paper Size** is set to *Letter* (8.5x11), **Form Length** is adjusted to *60*.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Front Tray Size *PCL Emulat Menu* Legal (8.5x14) Folio (8.5x13) **Letter (8.5x11)*** (USA) **A4 (210x297)*** (Europe) Exec (7.25x10.5) ISO B5 (176x250) Statement (5.5x8.5) A6 (105x148) Com-10 (4-1/8x9.5) C5 (162x229) DL (110x220) Monarch (3-7/8x7.5) C6 (114x162)	Specifies the size of paper loaded in the Front Tray.
Hex Dump *System Menu* **Off*** On	Print output as hexadecimal codes instead of normal print data. *When set to* On*, the Control Panel menus are not available.*
Interface Menu *Main Menu*	Invokes the Interface Menu.
Jam Recovery *PCL Emulat Menu* *PostScript Menu* **Off*** On	Determines how the printer recovers from a paper jam. • When set to *On*, the printer reprints any pages in the printer at the time of the jam, after the jam has been cleared. The printer does this by using a portion of memory to store data. This may slow throughput. • When set to *Off*, some pages may be lost after the jam has been cleared. The print job must be re-sent, specifying those pages that did not print as a result of the paper jam.

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Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Language *Main Menu* Deutsch **English** Español Français Italiano Português (BRA)	Specifies the language in which Control Panel messages are displayed, and the language in which Configuration Sheet and PCL Font List messages are printed.
Lang. Sensing *Parallel Menu* *Ethernet Menu* Off **On***	Controls automatic recognition of the page description language (PDL) used in an incoming print job. When set to *On*, if the designated port receives print jobs of different PDLs—such as a PostScript print job followed by a PCL print job—it can automatically sense which PDL the print job is using. It does this by sampling the incoming data stream, then switching to the perceived language for that job or to the **System Language** setting if it fails to sense the language. When **State Saving** (page D-16) is also set to *On*, the permanently downloaded fonts and macros are saved in memory, eliminating the time to download them again when switching between PDLs occurs.
LocalTalk Menu† *Interface Menu* † Appears only when the DNIC-L'TALK option is installed.	Invokes the LocalTalk Menu.
Mailbox Menu† *Interface Menu* † Appears only when the Mailbox/Collator option is installed.	Invokes the Mailbox Menu.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Manual Size *PostScript Menu* Legal (8.5x14) Folio (8.5x13) **Letter (8.5x11)*** (USA) **A4 (210x297)*** (Europe) Exec (7.25x10.5) ISO B5 (176x250) Statement (5.5x8.5) A6 (105x148) Com-10 (4-1/8x9.5) C5 (162x229) DL (110x220) Monarch (3-7/8x7.5) C6 (114x162)	Specifies the size of paper loaded in the Front Tray.
Memory Check *Test Menu*	Performs a complete check of printer memory (resident and any SIMMs installed) and reports the results on the Control Panel display. **Memory Check** is more extensive than the check performed when the printer is powered on. When you invoke **Memory Check**, you will see: `Memory Check` `Please Wait....` Before **Memory Check**, any partial pages are ejected and any incomplete print jobs, permanently downloaded fonts, and macros are cleared from memory. After **Memory Check** is finished, the printer reboots to its power-on state. If a problem occurs, the Control Panel will display a numeric diagnostic code. See Table 6.2 in *Chapter 6: Troubleshooting* to locate the diagnostic message associated with the numeric code.
Orientation *PCL Emulat Menu* **Portrait*** Landscape	Specifies page orientation.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Output Bin *PCL Emulat Menu* *PostScript Menu* Standard OCT No Offset† OCT On Job† OCT On Job/Copy† Collator† Bin1 - Bin10† † Appears only when the option is installed.	Specifies where the printer should direct its output.
Page Protection *PCL Emulat Menu* **Off*** A4 (210x297) Legal (8.5x14) Letter (8.5x11)	Reserves memory for a full page of the selected paper size. Avoids `Page Too Complex` errors. Set **Page Protection** to the largest size paper on which you will print.
Page Protection *PostScript Menu* **Off*** On	Reserves memory for a full page of the selected paper size. Avoids `Page Too Complex` errors. The *On* setting is used for all sizes in PostScript.
Page Size Cont *PCL Emulat Menu* **Off*** On	Controls the printer's behavior when the correct size of paper is not loaded. • When set to *Off*, the printer will wait for **Enter** `*` to be pressed before printing. • When set to *On*, the printer will timeout after 10 seconds of waiting for **Enter** `*` to be pressed and will then continue as if **Enter** `*` was pressed.  *This option is useful when the printer is on a network.*

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Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Paper Size *PCL Emulat Menu* Legal (8.5x14) Folio (8.5x13) **Letter (8.5x11)*** (USA) **A4 (210x297)*** (Europe) Exec (7.25x10.5) ISO B5 (176x250) Statement (5.5x8.5) A6 (105x148) Com-10 (4-1/8x9.5) C5 (162x229) DL (110x220) Monarch (3-7/8x7.5) C6 (114x162)	Specifies paper size used to print a page if no paper size is specified by your software application.
Parallel Menu *Interface Menu*	Invokes the Parallel Menu.
Password† *Mailbox Menu* 0000 - 7777 † Appears only when the Mailbox/Collator option is installed.	Controls enabling, disabling, and changing of passwords for collator mode or for a specific mailbox bin. The default for collator mode is 0000.
PCL Emulat Menu *Main Menu*	Invokes the PCL Emulat Menu.
PCL Font List *Test Menu*	Prints a complete list of all PCL fonts currently available in the printer.
Perform Enhance *System Menu* Off **On***	Prints jobs with maximum throughput. However, when **Page Protection** is set to *Off*, some complex jobs may not print successfully with minimum memory. If this occurs, set **Perform Enhance** to *Off*. If the job still does not print, then set **Page Protection** to *On* (for PostScript) or to the appropriate paper size (for PCL emulation), and install the required system memory. When **Perform Enhance** is set to *Off*, the system will optimize job processing in minimal memory, but throughput will be reduced.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Pitch *PCL Emulat Menu* 0.44 - 99.99 by .01 steps **10.00*** c.p.i.	Specifies the number of characters per inch (cpi) for the font represented by **Font Number** (page D-7). It appears only when the **Font Number** setting (page D-7) specifies a scalable fixed pitch font. **Up** ^ increments pitch by .01 cpi, from .44 to 99.99 cpi. **Down** v decrements by .01 cpi. Hold **Up** ^ o r **Down** v for approximately two seconds and **Pitch** scrolls in increments of 1.
Point Size *PCL Emulat Menu* 4.00 - 999.75 by .25 steps **12.00*** points	Specifies the point size (a measurement for type height, 1 point equals 0.351 mm or approximately 1/72 inch) for the font represented by **Font Number** (page D-7). Appears only when the **Font Number** setting specifies a scalable proportional spaced font, such as Times New Roman. **Up** ^ increments point size by .25 points, from 4.0 to 999.75 points. **Down** v decrements by .25 points. Hold **Up** ^ o r **Down** v for approximately 2 seconds and Pitch scrolls in increments of .25 points.
Port Enable *Parallel Menu* *LocalTalk Menu* *Ethernet Menu* Off **On***	Controls activation of the port. • When set to *On*, the port is enabled so that the printer can receive print jobs through it. The port becomes part of a port polling sequence that includes all ports. • When set to *Off*, the port is disabled so that no communication with the host occurs through this port. If you are not using the parallel port, you can set **Port Enable** to *Off*.
Port Timeout *Parallel Menu* *LocalTalk Menu* *Ethernet Menu* 5-999 seconds **30*** seconds	Time interval for determining when to end an incomplete print job and poll the next port in the polling sequence. This option works in conjunction with **Auto Job End** (page D-3).

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Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
PostScript Menu† *Main Menu* † Appears only with the PostScript option installed.	Invokes the PostScript Menu.
Power Saver *System Menu* Off 120 minutes 90 minutes **60 minutes** 30 minutes 15 minutes	The DocuPrint 4517 conforms to EPA Energy Star guidelines. The printer will enter a low power state after the specified period of inactivity. This timeout is adjustable to 15, 30, 60, 90, or 120 minutes via this option. When in the low power state, the printer displays `Power Saver On` on the Control Panel. When a print job is received while in the Power Saver mode, the printer may require up to 70 seconds of warm-up time before the first sheet is fed from the input tray.
Print Density *System Menu* 0 - 12 **3***	Controls the density of the image printed on the page. The lower the setting, the lower the density; the higher the number, the higher the print density. ***Changing the default setting can adversely affect gray shading and line sharpness. Change this setting with caution.***
Print Errors *PostScript Menu* **Off*** On	Controls PostScript's built-in error handler (debugger). Should the printer encounter a PostScript error while printing a job, PostScript prints an error sheet when **Print Errors** is set to *On*. This is useful on a network, as an error sheet will alert the user that the print job had errors and was canceled.
Print Quality *PCL Emulat Menu* *PostScript Menu* Normal **TrueRes*** Toner Saving	Controls print quality through the use of *TrueRes* for edge smoothing (enhancement), or *Toner Saving* for draft print quality. • *Normal* = no edge smoothing • *TrueRes* = edge smoothing • *Toner Saving* = draft print quality (to save on toner usage) *When* **Resolution** *(page D-15) is set to* 1200x600*, you cannot set* **Print Quality** *to* TrueRes *or* Toner Saving.
PS Font List† *Test Menu* † Appears only with the PostScript option installed.	Prints a complete list of all PostScript language typefaces on the printer.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Reset All *Reset Menu*	Initiates the Reset Printer, Reset Menus, Reset Ethernet, and Reset LocalTalk functions. *To ensure proper operation of this feature, cycle the printer (turn the printer off/on) before invoking Reset All.*
Reset Ethernet† *Reset Menu* † Appears only when the DNIC-E'NET option is installed.	Resets the Ethernet network interface card to its power-on state.
Reset LocalTalk† *Reset Menu* † Appears only when the DNIC-L'TALK option is installed.	Resets the Local Talk network interface card to its power-on state.
Reset Menus *Reset Menu*	Resets Control Panel menu options to their factory default settings. The command does not reset the settings for **Language**, **Defaults**, **Power Saver**, and **Passwords**. The printer remains offline, so you can work with other menus.
Reset Printer *Reset Menu*	Resets the printer to its power-on state. This option is useful when you have printing problems. First, cancel the print job from the host. Then, invoke **Reset Printer**. **Reset Printer** cancels any print jobs being processed and clears all temporary fonts and macros. **Reset Printer** *does not change the menu settings of any network option. However, any current print jobs being processed by a network option will be discarded.*
Resolution *PCL Emulat Menu* *PostScript Menu* **600x600*** 1200x600	Specifies dots per inch (dpi). *When* **Print Quality** *(page D-14) is set to* TrueRes *or* Toner Saving*, you cannot set* **Resolution** *to* 1200x600.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Source Mapping *PCL Emulat Menu* Options (Paper Sources): Upper Manual Manual Envelope Lower Large Capacity Envelope Feeder	Maps the PCL paper source commands to the printer's paper trays. Each paper source may be mapped to one of the following settings: Main Tray Front Tray Main-Front Tray Lower 1 Tray† Lower 2 Tray† Lower 1-Main† Lower 2-Main† Lower 1-Lower 2† Lwr1-Lwr2-Main† † Appears only when one or two optional lower trays are installed.
State Saving *PCL Emulat Menu* *PostScript Menu* **Off*** On	Reserves memory for saving permanently downloaded fonts and macros, when the printer switches from using the PCL printer language to using the PostScript printer language. • When set to *Off*, all "permanently" downloaded fonts and macros are cleared from memory when switching PDLs. They must be downloaded again when the printer switches back to PCL from PostScript. • When set to *On*, "permanently" downloaded fonts and macros are stored in printer memory. You eliminate the time to download them again when the printer switches back to PCL.  *Temporary fonts and macros are always cleared at the end of every print job.* **State Saving** requires 22 MB of memory if the PostScript option is installed. If the PostScript option is not installed, **State Saving** may be selected with 18 MB. This will prevent loss of downloaded PCL fonts and macros if applications change the setting of **Resolution** or **Page Protection**. Enabling **State Saving** can have an effect on printing speed. It is recommended that this option be enabled only with 22 MB of printer memory.

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Symbol Set *PCL Emulat Menu* Desktop ISO L1 ISO L2 ISO L5 ISO-4 UK ISO-6 ASCII ISO-11 Swedish ISO-15 Italian ISO-17 Spanish ISO-21 German ISO-60 Norw. V1 ISO-69 French Legal Math-8 Microsoft Publ. PC-8 PC-8 DN PC-8 Tk PC-850 PC-852 Pi Font PS Math PS Text **Roman-8*** Ventura Int'l. Ventura Math Ventura US Win 3.0 Win L1 Win L2 Win L5	Collection of characters available for a font, including uppercase and lowercase alphabets, punctuation marks, and special characters such as open and close quotation marks or international characters. *When you change* **Symbol Set**, *the settings for* **Font Number** *and* **Font Source** *are reset to their factory settings automatically.*
System Language *Parallel Menu* *Ethernet Menu* **PCL Emulation*** PostScript† † Appears only with the PostScript option installed.	Specifies the page description language (PDL) the printer will use for print jobs coming through the parallel port. *When* **Lang. Sensing** *(page D-9) is set to* On, **System Language** *is used only when the printer cannot detect the PDL used in the incoming print job.*

Table D.1 Control Panel menu options, settings, and descriptions *(continued)*

Menu Option, Location(s), Setting(s)	Description
Test Menu *Main Menu*	Invokes the Test Menu.
Test Print *Test Menu*	Prints a "test pattern" for analysis of print quality over the entire page; intended for use by the service technician. The number of Test Prints produced is determined by **Copies** (page D-4) and printed from the **Default Source** (page D-5), both specified in the PCL Emulat Menu. If the System Menu setting **Defaults** (page D-4) is *USA*, Letter (8.5x11) paper is used; otherwise, A4 paper is used.  ***Test Print** will cause a printer reset, clearing any incomplete jobs.*
Tray Switching *PostScript Menu* **Off*** Main-Front Tray Lower 1-Main† Lower 2-Main† Lower 1-Lower 2† Lwr1-Lwr2-Main† † Appears only when one or two lower trays are installed.	Controls the sequence of trays the printer uses when printing a page of a PostScript print job. The first tray of a sequence is used until it runs out of paper, at which time the next tray of the sequence is used (if it has the correct size of paper).
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Appendix E

Printer Resident Fonts

Base Printer Fonts ***E-2***
Printing a PCL Font List *E-3*
PostScript Fonts ***E-4***

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Base Printer Fonts

The LN17 base printer is equipped with 46 resident fonts (See Table E.1) that can be used for PCL jobs:

- 10 TrueType™ scalable typefaces
- 35 Intellifont™ scalable typefaces
- 1 PCL Bitmap font

Table E.1 LN17 base printer fonts

TrueType Fonts	Intellifonts		Bitmap Fonts
Arial Arial Bold Arial Bold Italic Arial Italic Symbol Times New Roman Times New Roman Bold Times New Roman Bold Italic Times New Roman Italic Wingdings	Antique Olive Medium Antique Olive Bold Antique Olive Italic Albertus® Semi Bold Albertus Extra Bold CG Omega Medium CG Omega Bold CG Omega Bold Italic CG Omega Italic CG Times Medium CG Times Bold CG Times Bold Italic CG Times Italic Clarendon Cond. Bold Coronet Medium Italic Courier Medium Courier Bold Courier Bold Italic Courier Italic	Garamond Antiqua Garamond Halbfett (Bold) Garamond Kursiv Halbfett (Bold Italic) Garamond Kursiv (Italic) Letter Gothic Medium Letter Gothic Bold Letter Gothic Italic Marigold Medium Univers® Medium Univers Bold Univers Bold Italic Univers Italic Univers Cond. Medium Univers Cond. Italic Univers Cond. Bold Univers Cond. Bold Italic	Line Printer Medium



Note

To review the PCL fonts in your printer, print a PCL Font List, as described on the next page.

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Printing a PCL Font List

1. **On the Control Panel, press Online ⇤ to take the printer offline.**
2. **Press Menu ▤, then Up ^ or Down v until you see:**

   ```
   Main Menu
   Test Menu
   ```

3. **Press Enter * and the display changes to:**

   ```
   Test Menu
   PCL Font List
   ```

4. **Press Enter * again to print the PCL Font List.**
5. **After the PCL Font List prints, press Online ⇤ again to bring the printer online.**

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PostScript Fonts

When the PostScript option is installed, there are 35 resident PostScript fonts available for printing PostScript jobs (as shown in Table E.2).

Table E.2 PostScript fonts

ITC Avant Garde Gothic® Book ITC Avant Garde Gothic Book Oblique ITC Avant Garde Gothic Demi ITC Avant Garde Gothic Demi Oblique ITC Bookman® Demi ITC Bookman Demi Italic ITC Bookman Light ITC Bookman Light Italic Courier Courier Bold Courier Bold Oblique Courier Oblique Helvetica® Helvetica Bold Helvetica Bold Oblique Helvetica Oblique Helvetica® Narrow Helvetica Narrow Bold Helvetica Narrow Bold Oblique Helvetica Narrow Oblique	New Century Schoolbook® Roman New Century Schoolbook Bold New Century Schoolbook Bold Italic New Century Schoolbook Italic Palatino® Roman Palatino Bold Palatino Bold Italic Palatino Italic Symbol Times® Roman Times Bold Times Bold Italic Times Italic ITC Zapf Chancery® Medium Italic ITC Zapf Dingbats®

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Appendix F

Printer Specifications

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Table F.1 LN17/LN17ps specifications

	LN17	LN17ps
Imaging Method	Electro-Photography	
Exposure System	Semiconductor laser beam (laser diode) scanning	
Image Resolution	600 x 600 dpi 1200 x 600 dpi	
Warm Up Time	Less than 70 seconds after power on	
Continuous Print Speed	Up to 17 ppm (pages per minute)	
Printable Area	For PostScript jobs, full size of the paper. For PCL 5e Emulation jobs: • Full size of the paper when the Edge to Edge option is set to *On*. • When the Edge to Edge option is set to *Off*, full size of the paper minus a 1/6 inch margin at the top, bottom, left, and right edges.	
Processor	Intel 25/50 MHz i960 JD CPU (with an i82961 KD banding co-processor)	
Maximum Monthly Duty Cycle	Up to 50,000 prints	
Nominal Voltage	110 - 115 V 220 - 240 V	
Nominal Frequency	50 Hz 60 Hz	
Power Consumption	Less than 580 W during operation; Power Saver mode operational after specified period of not printing (15, 30, 60, 90, 120 minutes, or Off)	
Noise Level	49.5 dB continuous sound; less than 35 dB in standby	
Temperature	41°F to 95°F during operation 5°C to 35°C during operation	
Relative Humidity	15% to 85% during operation	
Dimensions	294 x 442 x 418 mm (H x W x D 11.6 x 17.4 x 16.5 inches (H x W x D)	
Weight	18.6 kg 40.9 lbs	
Memory Capacity	64 MB maximum	

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Table F.1 LN17/LN17ps specifications *(continued)*

	LN17	LN17ps
Factory-Provided Features	One 250-sheet paper tray Front Tray (Multi-Sheet Bypass Tray) EP (electronic printing) cartridge Power cord Printer driver diskettes User documentation 2 MB RAM (printer memory)	One 250-sheet paper tray Front Tray (Multi-Sheet Bypass Tray) EP (electronic printing) cartridge Power cord Printer driver diskettes User documentation 6 MB RAM (printer memory) PostScript kit Digital Network Interface Card for Ethernet (DNIC-E'NET)
Available Options (See *Appendix A: Ordering Printer Options* for ordering information.)	4 MB SIMM 16 MB SIMM 32 MB SIMM 500-sheet Paper Deck and Cassette (lower tray) Offset Catch Tray (OCT) Mailbox/Collator Envelope Feeder 420 MB Hard Drive PostScript kit Digital Network Interface Card for Ethernet (DNIC-E'NET) Digital Network Interface Card for LocalTalk (DNIC-L'TALK)	4 MB SIMM 16 MB SIMM 32 MB SIMM 500-sheet Paper Deck and Cassette (lower tray) Offset Catch Tray (OCT) Mailbox/Collator Envelope Feeder 420 MB Hard Drive Digital Network Interface Card for LocalTalk (DNIC-L'TALK)
		Table F.1 Page 2 of 2

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Appendix G

LN17 Unique Printer Commands

Overview *G-2*
Paper Size *G-3*
Output Trays *G-5*
Raster Resolution *G-6*

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Overview

In addition to the standard PCL printer commands, Digital has added some unique settings for the LN17 printer in the following areas:

- Paper Size

 Values are added for the "#" parameter in the PCL Page Size command. See the section *"Paper Size"* (page G-3).

- Output Trays

 Additional values are added for the standard PCL destination command. See the section *"Output Trays"* (page G-5).

- Raster Resolution

 The PCL Raster Graphics Resolution command is expanded to allow 1200 dots per inch. See the section *"Raster Resolution"* (page G-6).

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Paper Size

Table G.1 shows the paper sizes and corresponding paper trays supported by the LN17 printer. An “X” indicates support for a paper size in a specific tray. The escape sequence number refers to the “#” parameter in the Page Size command, Esc & l (lowercase letter l not the numeral 1) # A.

Table G.1 Paper size support

Paper Size	Escape Sequence Number	Paper Trays			
		LN17 Printer			
		Main Tray	Lower Tray	Front Tray	Envelope Feeder
Executive	1	X		X	
Letter	2	X	X	X	
Legal (8.5 x 14”)	3	X	X	X	
A4	26	X	X	X	
Monarch (Env.)	80			X	X
Com10 (Env.)	81			X	X
DL (Env.)	90			X	X
C5 (Env.)	91			X	X
ISO B5	100			X	
A6	2003			X	
Folio (8.5 x 13”)	3001	X	X	X	
Statement (5.5 x 8.5”)	3002			X	
C6 (Env.)	3004			X	X

It is possible that an Envelope Feeder is removed while one of the PCL source mapping settings contains a sequence that includes the Envelope Feeder. To guard against this, the printer checks the source mapping

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settings and the presence of an Envelope Feeder each time the printer is powered on. If an Envelope Feeder is not attached, any mapping that contains “Envelope Feeder” will be changed to “Front.” If an Envelope Feeder is attached to the printer again, the Envelope Feeder will not be restored in any source mapping setting automatically. The Control Panel can be used to perform a “Reset Menus” or to select a new value for source mapping.

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Output Trays

The output tray is selected with the standard PCL destination command, but with additional values given in Table G.2 to address all the possible LN17 output trays. Selection of the collator output value causes each copy of the output to use a different bin of the optional Mailbox/Collator, the first *n* bins for *n* copies (up to 10). The HP standard output value of *2* will be accepted for compatibility, and will use the standard output tray.



Note

PCL destination command sequences given in Table G.2 begin with <Esc>&l (lowercase letter l not the numeral 1).

Table G.2 Output tray selection

Output Tray	PCL Command
Standard	<Esc>&\|1G
Offset Catch Tray (OCT)	<Esc>&\|99G
Collator	<Esc>&\|100G
Mailbox bin 1	<Esc>&\|101G
Mailbox bin 2	<Esc>&\|102G
Mailbox bin 3	<Esc>&\|103G
Mailbox bin 4	<Esc>&\|104G
Mailbox bin 5	<Esc>&\|105G
Mailbox bin 6	<Esc>&\|106G
Mailbox bin 7	<Esc>&\|107G
Mailbox bin 8	<Esc>&\|108G
Mailbox bin 9	<Esc>&\|109G
Mailbox bin 10	<Esc>&\|110G

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Raster Resolution

The PCL Raster Graphics Resolution command (<Esc>*t#R) is expanded to allow 1200 dots per inch. It also accepts negative arguments to indicate a resolution that applies in the fast-scan dimension only, in order to accommodate 1200x600 resolution.

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Appendix H

Environmental Specifications

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EPA Energy Star

As an Energy star partner, *Digital Equipment Corporation* has determined that this product meets the Energy Star guidelines for energy effieiency.

Acoustic Noise Figures

35 db(A) during standby

50 db(A) during printing

Preliminary declared values per ISO 9296 and ISO 7779/DIN EN27779:

Table H.1 Acoustics

	Sound Power Level LwAd, B		Sound Pressure Level LpAm, dbA (bystander positions)	
Product	**Idle**	**Operate**	**Idle**	**Operate**
Ln17	5.4	6.9	35	50

Note:

Current values for specific configurations are available from Digital representatives. 1 B = 10 dbA.

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Acoustic Noise Figures for Germany

Schallemissionswerte - Vorläufige Werteangaben nach ISO 9296 und ISO 7779/DIN EN27779:

Table H.2 Schallemissionswerte

	Schalleistungspegel LwAd, B		Schalldruckpegel LpAm, dBA (Zuschauerpositionen)	
Gerät	Leerlauf	Betrieb	Leerlauf	Betrieb
LN17	5.4	6.9	35	50

Hinwels:

Aktuelle Werte für spezielle Ausrüstungsstufen sind über die Digital Equipment Vertretungen erhältlich. 1 B = 10 dBA.

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FCC Compliance Statement for United States Users

Class B:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Shielded cables must be used with this equipment to maintain compliance with FCC regulations.

Caution: Changes or modifications not expressly approved by Digital Equipment Corporation could void the user's authority to operate the equipment.

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Compliance Statement for International Users

Canadian EME Regulations:
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Cet appareil numérique est conforme aux limites d'émission de bruits radioélectriques pour les appareils de Classe B stipulées dans le Réglement sur le brouillage radioélectrique du Ministère des Communications du Canada.

European EME Regulations:
"The CE marking applied to this product symbolizes Digital Declaration of Conformity with the following applicable Directives of the European Union:

Council Directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

A full declaration, defining the relevant Directives and referenced standards can be obtained from your Digital representative."

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Operational Safety

Your Digital equipment and supplies were designed and tested to meet strict safety requirements. These include safety agency examination, approval, and compliance with established environmental standards.

Attention to the following notes ensures the continued safe operation of your equipment.

Always connect the equipment to a properly grounded power source receptacle. If in doubt, have the receptacle checked by a qualified electrician.

WARNING: Improper connection of the equipment grounding conductor can result in electrical shock.

Always follow all warnings and instructions marked on, or supplied with, the equipment.

Always locate the equipment on a solid support surface with adequate strength for the weight of the machine.

Always exercise care in moving or relocating the equipment.

Always place the equipment in an area which provides adequate room area for ventilation and servicing.

Always use the materials and supplies specifically designed for your Digital equipment. Use of unsuitable materials may result in poor performance and, possibly, a hazardous situation.

Never use a ground adaptor plug to connect the equipment to a power source receptacle that lacks a ground connection terminal.

Never attempt any maintenance function that is not specifically described in this documentation.

Never obstruct ventilation openings. These are provided to prevent overheating.

Never install the equipment near a radiator or any other heat source.

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Never override or "cheat" electrical or mechanical interlock devices.

Never push objects of any kind into the ventilation openings.

Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the power source receptacle and contact your dealer or Digital to correct the problem.

If you need any additional safety information concerning the equipment or materials, contact your dealer or Digital.

WARNING: Use of controls, adjustments, or performance of procedures other than those specified herein may result in a hazardous radiation exposure.

This product will produce less than 0.1 ppm ozone during normal operation. The ozone produced is dependent on copy volume and is heavier than air. Providing the proper environmental parameters as specified by Digital will ensure that concentration levels meet safe limits.

Laser Safety

WARNING: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous light exposure.

This equipment complies with appropriate safety standards.

With specific regard to lasers, the equipment complies with laser product performance standards set by governmental, national, and international agencies as a Class 1 laser product. It does not emit hazardous light as the beam is totally enclosed during all phases of customer operation and maintenance.

When you perform various operator functions, laser danger labels may be visible. These labels are for your dealer or service technician and are placed on or near panels, or shields, which require a tool for removal. **THESE PANELS ARE NOT TO BE REMOVED BY USERS OF THE PRINTER. THERE ARE NO USER SERVICEABLE AREAS INSIDE THESE COVERS.**

Laser Safety Warning for Finland and Sweden

Luokitus on tehty standardin EN 60825 mukaisesti
Klassningen är gjord i enlighet met standarden EN 60 825

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

VAROITUS!
Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än i denna bruksansvisning specficerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

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